

PERSPECTIVES ON PATENTS: POST-GRANT REVIEW PROCEDURES AND OTHER LITIGATION REFORMS

HEARING BEFORE THE SUBCOMMITTEE ON INTELLECTUAL PROPERTY OF THE COMMITTEE ON THE JUDICIARY UNITED STATES SENATE ONE HUNDRED NINTH CONGRESS SECOND SESSION

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TUESDAY, MAY 23, 2006

U.S. SENATE,
SUBCOMMITTEE ON INTELLECTUAL PROPERTY,
COMMITTEE ON THE JUDICIARY,
Washington, DC.

The Subcommittee met, pursuant to notice, at 2:08 p.m., in room SD-226, Dirksen Senate Office Building, Hon. Orrin Hatch, (Chairman of the Subcommittee) presiding.

Present: Senators Hatch and Leahy.

OPENING STATEMENT OF HON. ORRIN G. HATCH, A U.S. SENATOR FROM THE STATE OF UTAH

Chairman HATCH. We are happy to welcome you all here to this very important hearing on patent reform today. We have some really stellar witnesses, and I look forward to it myself.

Today's hearing will focus principally on questions surrounding post-grant review proceedings. As many of you know, post-grant review refers generally to the procedures allowing the validity of a patent to be challenged in an administrative proceeding conducted by the Patent and Trademark Office, rather than in court litigation.

Under current law, there are now reexamination procedures by which the PTO may reconsider a patent's validity at the request of an interested party. However, current reexamination proceedings are very limited and do not allow for a full consideration of a patent's validity. As a result, even when reexamination is available, potential litigants generally wait to challenge a patent's validity until an infringement suit has been brought against them despite the higher cost and prolonged uncertainty of doing so.

Proponents of adopting a more robust post-grant review proceeding, myself included, believe that providing a more efficient means of challenging a patent's validity in an administrative proceeding is necessary to address systemic problems in our patent system, making post-grant review an essential component of any meaningful reform legislation.

There appears to be substantial agreement regarding the need for a more meaningful post-issuance review. There are strong disagreements over specific attributes and scope. The most significant of these disagreements appears to flow from fundamentally different opinions regarding the appropriate policy goals of such a

procedure. From my perspective, the proponents of post-grant review appear to rely on one or more of the following basic policy rationales for expanding administrative review.

First, some argue that the PTO is institutionally better equipped than the Federal Courts to resolve highly technical disputes regarding patentability.

Second, many feel that a relatively inexpensive opportunity to challenge patent validity at an earlier point in time would significantly improve patent quality by allowing challengers to invalidate or narrow problematic patents soon after they are issued.

Third, some believe that various aspects of litigation, including the presumption of validity, and the clear and convincing standard of proof place unwarranted burdens on a party seeking to challenge a patent's validity. They argue that these burdens would not be necessary in a specialized system of adjudicating patent validity due to the judge's higher level of technical expertise, and that such a system would allow a fairer opportunity to challenge validity.

While these are not necessarily inconsistent rationales, there are significant tensions between the second and third goals. Obviously, the most suitable type of post-grant review system depends on the relative importance accorded these goals as well as how one balances a patent owner's countervailing interest and sufficient certainty and finality with respect to the validity of an issued patent.

At its most fundamental level some form of post-grant review is necessary to ensure that the validity of questionable patents as adjudicated, which corresponds to the goal of improving patent quality by allowing a less expensive way to adjudicate validity issues.

At present it appears that the substantial cost, delay and uncertainty of challenging a patent frequently outweigh the benefit to any one potential litigant of doing so. Thus, even though the aggregate costs of a suspected patent may be substantial, in many cases no single party has sufficient incentive to litigate the patent's validity to conclusion. In part this is because the benefits of a successful challenge flow to everyone against whom the patent could have been asserted, while the litigation costs are borne by only one of them. If reducing the disincentives to validity challenges is the primary goal of post-grant review, it would likely be necessary to limit or exclude various factors that would greatly increase its cost, including the availability of discovery and extended proceedings with live testimony.

Additionally, as Professor Thomas and others have suggested, simply decreasing the cost would not address the public goods aspect of patent challenges. Rather, doing so, would require some additional incentive or "bounty."

On the other hand, to the extent that the main goal of post-grant review is to create a specialized system for fully adjudicating patent validity, it would be necessary to include many aspects of adversarial litigation that would drive up the cost and potential delays associated with these proceedings.

For obvious reasons, if post-grant review largely replicates the costs and delays of court proceedings, it is unlikely to be an attractive alternative to litigation unless the challenger's likelihood of success is increased by stripping away the presumption of validity and lowering the standard of proof required to establish invalidity.

However, if the solution is merely to allow patents to be invalidated using a lower standard, it is unclear why we go to the trouble of inventing or creating an entire post-grant review system instead of simply lowering the standard that is applicable in litigation.

To date, widely disparate proposals and suggestions regrading post-grant review have been made by stakeholders, academics and lawmakers. At one of the spectrum are proposals that would create a low-cost streamlined proceeding by simply expanding the current inter partes reexamination.

At the other end are suggestions for the creation of specialized patent courts that would partially supplant Federal Court litigation. Many proposals fall somewhere between these two extremes. For example, some propose making an expanded reexamination available throughout the life of a patent, while also providing a separate more robust opposition proceeding for a short window of time after a patent's issuance.

There are also a variety of suggestions regarding how to increase the incentives to challenge patents preemptively, such as awarding attorneys' fees to a successful challenger, or according a presumption of validity only to patents that have survived the challenge to their validity.

It is my hope that today's hearing will shed some light on how to address the fundamental tension between these various models of post-grant review and their relative benefits and limitations.

I do look forward to the witnesses' testimony and to a lively discussion of these important issues, and we will take Senator Leahy's opening statement whenever he arrives, and we will interrupt whatever we are doing to take that statement. I understand he is on his way.

We have a particularly wonderful panel here today, and I will just introduce them all.

Mark Chandler, a Senior Vice President, General Counsel, Cisco Systems, Inc.; Philip S. Johnson, Chief Patent Counsel for J&J, Johnson & Johnson; Nathan P. Myhrvold, Chief Executive Officer of Intellectual Ventures; John R. Thomas, Professor of Law, Georgetown University Law Center; and Andrew Cadel—am I pronouncing that right or is it Cadel.

Mr. CADEL. Cadel.

Chairman HATCH. I knew there would be some fancy way of saying it.

[Laughter.]

Chairman HATCH. Managing Director, Associate General Counsel and Chief Intellectual Property Counsel, JP Morgan Chase.

This is a really good panel, and we are really grateful to have you here, and we need some help in this area, so I am going to particularly pay attention to what you have to say, and let's hope that we can arrive at what is really the best of circumstances in the end.

So, Mr. Chandler, we will begin with you.

**STATEMENT OF MARK CHANDLER, SENIOR VICE PRESIDENT
AND GENERAL COUNSEL, CISCO SYSTEMS, INC., SAN JOSE,
CALIFORNIA**

Mr. CHANDLER. Thank you, Mr. Chairman. My name is Mark Chandler. I am Senior Vice President and General Counsel of Cisco Systems.

Just three points following on your opening statement. First, why we think the current patent litigation system does not work; second, how a post-grant administrative review process can help remedy one defect of the system; and third, why some other changes are also required.

Cisco has over 47,000 employees and invests over \$3 billion each year in research and development. Our innovation helped create the global Internet. We hold over 2,500 issued U.S. patents, and have applied for over 4,000 more. Cisco believes deeply in strong protection for intellectual property.

So why would a company like Cisco favor legal changes that some say would decrease the value of patents, and why would the manufacturer of the Blackberry pay over \$600 million to license patents that the PTO said were invalid?

The answer is that the patent litigation system is broken. When a patent holder is willing to license patented technology, the system should encourage negotiation of a license fee reflecting the fair value of the intellectual property. Our current litigation system completely fails that test. The current rules incentivize winner-take-all jackpot-like strategies. The patent litigation rules themselves are now a means of enhancing patent value instead of a neutral system for resolving disputes.

Increasingly, those who manufacture products or offer services like Cisco are defendants in a new type of patent litigation. These efforts use in *terrorem* leverage that comes from recent changes in the patent system and abuse of that system to receive disproportionate and unearned fees, often through just the threat of litigation.

Justice Kennedy recognized this in his opinion in the Supreme Court's *eBay* decision. Let me quote him: "[i]n cases now arising...the nature of the patent being enforced and the economic function of the patent holder present considerations unlike earlier cases. An industry has developed in which firms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees".

In my written statement, I have provided documentation regarding abuse of patent litigation and studies of that problem. That said, we reject the use of pejorative terms such as "patent trolls." The rise of this new type of litigation is not the issue, it is merely a symptom of an underlying problem. That is why Cisco and hundreds of other technology manufacturing media and financial services companies have joined together to seek reform.

One important reform is a sensible post-grant review system linked to but separate from the litigation process. As the absurd outcome in the Blackberry case illustrates, there is currently no effective way to review the validity of a patent. The *inter partes* process is not a practical option due to the broad estoppel standard,

and the presumption of validity that applies in litigation precludes effective challenges in court and drives extorsive negotiations.

The solution is post-grant proceedings heard by administrative law judges trained to fairly assess merits. A first window immediately after a patent is granted will not solve the problem because a company like mine simply cannot anticipate when a patent is issued how the patent might be stretched to apply. A second window after receipt of notice of infringement would place the decision-making where it belongs, with the export agency guided by appropriate evidence.

Patent holders must not face dilatory and duplicative proceedings, however. Justice delayed is justice denied in the patent system as well. To avoid unnecessary burdens the second window has to be constrained.

First, if the prospective defendant choose to initiate post-grant review, he must estopped from relitigating any issues actually raised and decided in the proceeding.

Second, if the defendant chooses not to initiate an administrative proceeding, then any later court challenge to patentability must overcome the presumption of validity.

Third, a patent holder should have the right to block initiation of this post-grant proceeding, but in that case the presumption of the patent's validity would not apply in any subsequent court action.

And finally, strict time limits and penalties should be included to ensure an administrative proceeding is not used for delay.

This way we would avoid duplicative litigation, and also avoid the problem of the broad estoppel in the current inter partes system.

There are several other necessary changes, however. First, venue at principle should be enacted to prevent forum shopping. Second, damage rules should require that fact finders determine actual inventive contribution of the patented technology, rather than basing royalties on a product's entire market value. Justice Kennedy recognized the harmful effect of the current rule in his observations about the leverage that is applied when "the patented invention is but a small component of the product the [defendant] companies seek to produce."

Mr. Chairman, I see my time has expired. May I make some final, concluding remarks?

Chairman HATCH. Go ahead.

Mr. CHANDLER. Thanks. Two other principles that should be included are to make sure that U.S. patents apply only in the United States so there is not double jeopardy for products manufactured outside the U.S., and willfulness standards should better reflect traditional principles regarding treble damages.

To conclude, it is simply not true that these modest reform proposals will eliminate longstanding rights of patent holders. As the Supreme Court unanimously found with respect to injunctions, the present rules and types of litigation they have engendered, are the result of recent decisions and exploitation of loopholes in the system.

Congress should act to restore fairness and balance to patent litigation, and we look forward to working with you.

[The prepared statement of Mr. Chandler appears as a submission for the record.]

Chairman HATCH. Thank you very much.

Mr. Johnson, we will take your statement.

STATEMENT OF PHILIP S. JOHNSON, CHIEF PATENT COUNSEL, JOHNSON & JOHNSON, NEW BRUNSWICK, NEW JERSEY

Mr. JOHNSON. Thank you. Chairman Hatch, it is indeed a pleasure to appear today. I want to thank you for the opportunity to testify on patent reform. Although I am active in a number of professional organizations, I am appearing here today only in my capacity as Chief Patent Counsel at Johnson & Johnson.

Johnson & Johnson is a family of more than 200 companies, and is the largest broad-based manufacturer of health and personal care products in the world. Collectively, Johnson & Johnson companies represent this country's largest medical device business, its third largest biotechnology business, its fourth largest pharmaceutical business, and a very substantial consumer and nutritional and personal care business. Johnson & Johnson companies employ over 55,000 people in the United States, and these businesses are research-based businesses that rely heavily on the U.S. patent system and its counterpart systems around the world.

In 2005, Johnson & Johnson's businesses invested \$6.3 billion in research and development, and indeed from time to time, Johnson & Johnson's companies have become involved in patent litigation, about equally as plaintiffs as they are defendants. While we are occasionally sued by non-manufacturing patentees, most of our litigation is with actual or would-be competitors.

I am here today because I want to see us preserve and enhance the patent system's incentives to invest heavily in research and development. By doing so, we will not only improve the quality of life through new products and processes, but we will preserve our global competitiveness in an increasingly competitive world.

While other issues are perhaps better at capturing the public's attention, I believe there is no more important issue that faces us today than that of patent reform.

The Coalition Text attached to my written testimony is a balanced and politically achievable approach to patent reform. It includes an immediate post-grant 9-month opposition window designed as an immediate quality control check on newly issued patents. To stimulate public involvement in the process, it features lowered collateral estoppel and burden of proof standards. It also features an expanded list of validity issues that may be raised as compared to ex parte reexamination.

The institution of such a post-grant opposition procedure will, nonetheless, come at a very substantial cost, especially to patentees who may have trouble affording the extended uncertainty of the proceedings that such an opposition approach might engender. To Johnson & Johnson and the 38 other companies and organizations that support the Coalition Text, these costs are a tradeoff worth making in favor of improved patent quality and reliable enforceability. The Coalition Text does not include any provision for subsequent post-grant oppositions, although ex parte and inter partes re-

examinations will continue to be available to would-be patent challengers throughout the life of the patent.

To provide a so-called second window opposition, especially one with lowered collateral estoppel and burden of proof standards, as suggested, for example, by Mr. Chandler, would be grossly unfair to patentees. Such proceedings would be counterproductive to participation in first window oppositions, would provide an unfair second bite at the apple to accused infringers, would likely add to the ultimate expense of patent enforcement, would provide an opportunity to infringers to disrupt patent rights near or at the end of the patent's term, would create the potential for concurrent and/or conflicting opposition and court proceedings and appeals, and/or would unfairly delay rightful enforcement of valid patents.

Understandably, second window opposition proposals have been widely opposed within the intellectual property community, not only from those who oppose first window oppositions, but from a far broader spectrum of stakeholders, including AIPLA, IPO, ABA-IPL, PhRMA, BIO and many others from a broad base of industries, including Johnson & Johnson.

Another important aspect for patent reform is inequitable conduct. This defense, which has become the defense of last resort in patent cases, has a negative impact both on patent litigation and on the practice before the Patent Office.

Although the National Academies recommended that this defense be eliminated, the Coalition Text proposes to preserve it, but to apply two threshold limitations: a pleading limitation requiring that at least one asserted claim first be held invalid, and an evidentiary threshold requiring that the challenger show that but for the inequitable conduct the patent would not have been allowed.

On the damage issue, Johnson & Johnson, frankly, sees no need for reform. Throughout the debate in the House and here again today, proponents of damages reform failed to support their position by citation to court cases showing that the courts are getting it wrong. In our experience, they simply are not. Where lost profits are involved, and where nexus is shown between the patented invention, its features, attributes and characteristics, and those included in the accused infringing product, we see no problem in having the royalty base include the entire value of the infringing product or process.

There are areas of common ground, however, including agreement or apparent agreement on venue, on adequate funding for the United States Patent and Trademark Office, and on approaches that would punish people who attempt to game or otherwise abuse enforcement proceedings.

I look forward to working with the Committee on these issues and any others that may come to the fore. Thank you.

[The prepared statement of Mr. Johnson appears as a submission for the record.]

Chairman HATCH. Thank you, Mr. Johnson.

Senator Leahy is here, and he takes a tremendous interest in these intellectual property issues. We will take his statement at this time. Mr. Myhrvold, we will turn to you as soon as he is through.

**STATEMENT OF HON. PATRICK J. LEAHY, A U.S. SENATOR
FROM THE STATE OF VERMONT**

Senator LEAHY. Thank you, Mr. Chairman. As you know, we are handling immigration on the floor, so we are kind of juggling back and forth. Unfortunately, it seems that everything that goes on goes through this Committee as of recent time.

But the very complex issues in patent litigation, something that Senator Hatch and I have been grappling with for years, we were kind of asked by a lot of the others, both parties, to do that. A number of you I have met with both here and out of this room, so it is helpful what we are hearing from our witnesses. As I look around the room, I see an awful lot of people I have worked with over the years, and appreciate their help too.

We have to figure out what the proper scope and form of review procedures are after the Patent and Trademark Office has granted a patent. It raises matters of patent law, administrative adjudication, and litigation strategies, all of these things. I think we have to keep in mind what our Constitution said, enshrined patent rights for the reason "to promote the progress of science and useful arts." There is no mandate from the Founders that we embrace any particular approach to the patent litigation system, no requirement that we favor one side or another in a patent dispute, no directive to ensure that any other policies, however laudable they might be, be advanced. We are charged with creating and maintaining a system that gives inventors exclusive rights in their inventions for limited times in order, as I said, to promote the progress of science and useful arts.

I believe an effective post-grant review procedure can and should do just that. It allows us to weed out efficiently invalid patents. The PTO can correct its own errors, and they do make errors. Infringement claims can be evaluated more effectively. And patent holders can be more confident in the rights secured to them.

I have read over the written testimony. We could have a little bit of a lively debate among the people who are here. In fairness, I have said before I favor a strong post-grant process, including a limited—understand the word—limited second window in the event that a patent holder sues for infringement. But there are a multitude of subsidiary issues to be addressed within that framework.

I do want to note, in closing, the strong praise I have of Senator Hatch for doing this. He and I have tackled these things over the years, I think sometimes, Mr. Chairman, when nobody else wanted to. We have always been able to reach a bipartisan conclusion. I think we are better for that, and that is what we are trying to do here.

So I will put my whole statement and any other statements from this side in the record.

Chairman HATCH. Without objection, so be it.

[The prepared statement of Senator Leahy appears as a submission for the record.]

Chairman HATCH. We are so happy to have Senator Leahy here. When we get together, we can get things done, and so we are working hard on this to try and come up with something that will hopefully bring the parties together. That is pretty tough to do.

Mr. Myhrvold, we are honored to have you here, and look forward to your testimony.

STATEMENT OF NATHAN P. MYHRVOLD, CHIEF EXECUTIVE OFFICER, INTELLECTUAL VENTURES, BELLEVUE, WASHINGTON

Mr. MYHRVOLD. Well, I am honored to be here, Mr. Chairman, Member of the Committee. I am here to talk from the perspective of an independent inventor, which is my current job title. I filed more than 100 patent applications myself, but prior to this, I was Chief Technology Officer of Microsoft for 14 years, so I also something of the issues that happen in a big company.

The first point I would like to make is that this really is an issue about property rights, and the patent system bestows property rights on an idea in order to give that idea the same status as any other kind of property in our capitalist system. It is very important that we keep that property right and that we keep it for small inventors. So regardless of whether it is Cisco or Microsoft, many of the most exciting huge companies today were tiny companies in recent memory, started by one or two people that had a great idea. And it is very important that this Committee keep that in mind. The small seeds are what grow this great forest of ideas. Going forward, to be competitive, we need to keep that.

I think my second point is that this is not about tort reform. Although litigation is part of the patent system, I do not think this is really a tort situation. It is not about an abuse—there are, of course, abuses to litigation. There are abuses of every system that people have. I would suggest to you that the patent system is not quite in the state of crisis some others may think it is. Patent litigation is the least common form of intellectual property lawsuit, so it is lower than both trademark and copyright. It has been growing because the number of patents have been growing, but on the basis of the litigations per patent, that has been declining. In fact, it is at the lowest now that it has been since 1995.

The court records show that the number of cases that reach trial has been flat in recent years. 104 cases reached trial in 1998, 107 did in 2005. That is not a giant crisis.

The awards for patents have gone up, but so has the stakes in technology. We took a look at added up the awards of the top set of tech companies that have paid big awards, and we discovered that over a 13-year period, this set of companies had paid \$3.7 billion. It is a lot of money, until you consider that their revenue for the same period was an incredible \$1.4 trillion. I think maybe the Senate is the only place you can go and say trillion and not have it be a big number, just amazing.

So if you take those patent cases—

Chairman HATCH. That was a terribly cheap shot, but it was—
[Laughter.]

Mr. MYHRVOLD. But I know you are not disputing it.
[Laughter.]

Chairman HATCH. No, no, I think you have a very good point.

Mr. MYHRVOLD. All together, these losses to patent things amount to about one-quarter of 1 percent of the revenues of these companies over this period. So while it is great to reform it and I

am for many kinds of patent reform, we should keep in perspective this is not a litigation disaster. When you look at the companies that receive those payments, they are mostly very honorable companies.

Post-grant review is a very important topic. I want to first though mention that the existing forms, *ex parte* and *inter partes* are far more successful than they are made out to be. *Ex parte* in 2005 handled 524 cases. That is more than five times the caseload that the Federal courts handled. *Inter partes* only really got going in 2003, so it is 3-years-old. It doubled between 2004 and 2005. It is already over half the rate, the caseload.

So why are we looking for a new one? Why do we need a new post-grant mechanism? I suggest it is because this is a slippery slope. If you want a streamlined procedure, you have to take something out, or it has the full cost of trial. But if it is streamlined, there is a lot of advantages to going to trial. So as a result, we continually creep along, adding more and more features to these post-grant reviews, trying to recapitulate and recreate what a trial is.

And so my solution to that is to suggest that in fact a dedicated patent court might be a better approach. Rather than say let's create a semi-trial over in the Patent Office and a full trial in the judiciary, let's restructure the trials in the judiciary to eliminate forum shopping, eliminate a bunch of the things that make it difficult and complex.

With respect to first and second window, I would go back to what I said at the beginning, the small inventor is incredibly important here. We need to be able to give them certainty and give them speed. An extended period of review after the patent is issued means, in practical sense, they do not have the patent yet. Their financial backers probably will not give them the extra thing. They will say, "Now, wait a minute. You have to go that extra period." It is like increasing pendency, the amount of time it takes to get a patent.

Second window, I would agree with Mr. Johnson, is an incredible burden to place on the patent holder, and it is not going to serve a purpose of actually taking anything away from trial.

To echo remarks that you made, Mr. Chairman, there is a huge public value to bad patents being taken out of the system. A strict time limit on a first window—if we need one; I am not convinced we do—but a strict time limit creates the incentive for people to speak now or forever hear your piece.

And I see that I have actually run over my time, so thank you very much.

[The prepared statement of Mr. Myhrvold appears as a submission for the record.]

Chairman HATCH. Thank you. We appreciate hearing from you. Professor Thomas, we will turn to you.

**STATEMENT OF JOHN R. THOMAS, PROFESSOR OF LAW,
GEORGETOWN UNIVERSITY LAW CENTER, WASHINGTON, D.C.**

Mr. THOMAS. Thank you, Mr. Chairman, for the opportunity to testify on the subject of post-grant review procedures.

I appear today on my own behalf as a concerned observer of the patent system.

One of the issues the two previous witnesses had discussed relates to time limits. Is there to be an initial 9-month period for oppositions, and then followed by a 6-month second window. As you have just heard, imposing time limits is justified on the basis of uncertainty and burden. I think that further explanation of this issue is appropriate. The 9-month period appears to be adopted from the European Patent Convention, which I think is a similar limit. However, the European Patent Convention does not put an end to patent challenges after the 9 months. Signatory states of the European Patent Convention are free to challenge patents in different national member states at the national level, and nullity proceedings or other sorts of proceedings once the 9 months expires.

In the U.S., the Patent Act places no limit on filing a reexamination, and indeed, patent proprietors obtain the ability to tune up their patents by returning to the U.S. PTO and filing a reissue procedure throughout the entire term of the patent.

Similarly, continuation practice, the doctrine of equivalence, create a relatively fluid environment for patent claims. Within that environment I think it is relatively difficult to make the case that lenient opposition time limits will contribute to uncertainty.

Strict time limits may also detract from the ability of an opposition to serve as a prompt, inexpensive mechanism for assessing a patent's validity. Patents often issue long before the inventions they claim become commercially viable. Areas of which you know very well, pharmaceuticals and medical devices, patents often issue years before FDA marketing approval occurs.

Other patents are sold to owners of more aggressive litigation postures. Other patents describe inventions that are simply ahead of their time. So debate over time limits for oppositions may not be properly centered on whether we ought to have a 6-month window, but really whether we ought to have any time limits at all, for filing the opposition.

You will note there is a time limit sense that we ought to avoid harassment of patentees. Experience under the German patent system suggests the opposite. There used to be a 5-year limit on contesting validity for German patents, and the experience was that virtually all of the oppositions were filed on the eve of the 5-year deadline. When they got rid of the deadline, suddenly the number of oppositions dropped.

On the other hand, there may be concerns that the availability of the second window discourages potential opponents from taking advantage of the first window. One way of solving that problem, again, based on German practice, is to adjust the presumption of validity. Under the law of many European states, a presumption of validity does not attach during the initial opposition period, but it would attach in a subsequent nullity proceeding. We could borrow from that approach here, allow a presumption of validity to attach in the second window, but not in the initial term for an opposition.

Now, following the lead of Professor Mark Janis, I would also encourage Congress to consider, when looking at some of the particulars of patent opposition proceedings, to look at trademark opposition proceedings. The U.S. PTO has run a trademark opposition for many years without really any sort of significant complaint, got lots of rules like discovery and motion practice. While I do not want

to naively suggest that those ought to be transferred to the patent context where the stakes can be higher and the issues more numerous and complex, it seems like a good starting point. Also, certainly opposition procedures ought to reflect the substantive patent law provisions they complement. So if the substantive provisions tend to lead to less complex issues like a first inventor to file a priority system or elimination of thus mode, that would certainly weigh against discovery provisions in an opposition. It would seem that if we streamline those provisions there is certainly less need for discovery.

Senator, you have already mentioned the public goods problem that accompanies patent litigation. The legislation that bears your name, the Hatch-Waxman Act, incorporates 180-day generic exclusivity to account for those kind of public goods problems. Within the oppositions, as you have mentioned, one mechanism for recognizing the public interest involved in patent challenges would be an attorney fee shifting rule with respect to oppositions. It could be two way, it could be one way, in favor of a successful patent challenger. Of course, another thing to think about is who is going to bring the oppositions, but also how they are going to terminate. Of course, many patent adversarial proceedings terminate by settlement, and, of course, that potentially leaves an invalid patent on the books.

So one notion to think about is should we have a notice-based proceeding like the Medicare Modernization Act or Hatch-Waxman pharmaceutical litigation, or should, in fact, like the reexamination statute, we compel that these oppositions run to their full term.

Thank you very much.

[The prepared statement of Mr. Thomas appears as a submission for the record.]

Chairman HATCH. Well, thank you, Professor, we appreciate it. Mr. CADEL.

STATEMENT OF ANDREW CADEL, MANAGING DIRECTOR, ASSOCIATE GENERAL COUNSEL AND CHIEF INTELLECTUAL PROPERTY COUNSEL, JP MORGAN CHASE, NEW YORK, NEW YORK; ON BEHALF OF THE FINANCIAL SERVICES ROUNDTABLE AND BITS

Mr. CADEL. Thank you. Chairman Hatch and Ranking Member Leahy, my name is Andy Cadel, and I am a Managing Director, Associate General Counsel and Chief Intellectual Property Counsel at JP Morgan Chase, and I am pleased to be testifying today on behalf of the Financial Services Roundtable and BITS, which are affiliated financial services trade associations.

As you know, the financial services community—

Chairman HATCH. Is your microphone on?

Mr. CADEL. I believe it is. Maybe I am not talking close enough.

Chairman HATCH. You might need to pull it a little closer.

Mr. CADEL. Better?

Chairman HATCH. I can hear, but I am not sure people in the back can.

Mr. CADEL. If you cannot hear me, let me know.

As you know, the financial services community is intensely interested in patent quality and litigation issues, and is grateful that

you are considering these matters. We believe that various provisions can be adopted which will make our patent system and effective and efficient mechanism that fosters economic growth, and have submitted written testimony to this effect.

In my oral testimony I would like to focus on two of these provisions: one, creating a meaningful opposition proceedings with two windows; and two, establishment of an interlocutory appeal for *Markman* rulings.

In the opposition proceeding, the PTO proposed a post-grant review of patent claims in its 21st Century Strategic Plan that was released in 2002, and we strongly support establishment of an opposition proceeding, again, with two windows.

With respect to the first window, we recommend that the opposition procedure allow the public to petition the PTO to cancel one or more claims of a patent within 12 months of issuance. The counterpart U.K. opposition law provides a period of 24 months, European Patent Convention is only 9 months. So we respectfully suggest that this reasonably moderate time of 12 months is a good midpoint.

With respect to a second window, we recommend allowing anyone who is threatened with a patent infringement action to follow the request for an opposition proceeding within 6 months after receiving notice of the patent infringement action. Without the second window, the opposition proceeding would not achieve its goal of significantly improving patent quality by having suspect patents reviewed.

In the United States the financial industry has no infrastructure in place to monitor patents in time for parties to take full advantage of the first window. As many products and services today integrate multiple technologies, it will be difficult, if not impossible, to monitor all the categories necessary in the time allotted for the first window. Further, the public often does not truly know what the patentee intends for the scope of the claims until the patent is enforced.

We respectfully submit that it is just not reasonable to expect businesses to review all patents issued within a year of their issue date, determine every possible interpretation an inventor may ascribe to the claims, identify those of suspect validity, and then undergo the expense of attacking all those that may be applicable and suspect during a first window. I suggest that is difficult for large institution such as financial firms, even harder for small businesses.

For both windows, launching an opposition would foster a more detailed scrutiny of patents than ordinarily occurs during the typical 25 hours or less of examination at the PTO. A first window could be subject to a preponderance of evidence standard for showing of validity, and the second window could be generally subject to a clear, convincing standard for proof of validity, consistent with current treatment in trial court to foster efficient use of dispute resolution resources.

The second topic I would like to address is interlocutory appeals and *Markman* hearings. One of the most, if not the most, important determinations in a patent litigation is the determination of the meaning of the claims. This determination takes place early in

the suit during a *Markman* hearing, and will eventually define the scope of the patent. This determination is crucial to the question of both validity and infringement. It is difficult to overstate the importance to the parties of obtaining a claim construction they can rely on.

District Court patent claim interpretations are frequently overturned by the Federal Circuit. For instance, in the period from 1996 to 2003, 35 percent of District Court claim interpretations were overturned by the Federal Circuit. The inconsistent claim interpretations between the District Court and the Federal Circuit create uncertainty and imbalance between the parties.

An interlocutory appeal to the Federal Circuit should be permitted after a *Markman* hearing. This procedure would help to mitigate the judicial inefficiency that occurs when a full trial is conducted based on an incorrect interpretation of a patent at the District Court proceeding, and then the Federal Circuit modifies or reverses that interpretation and orders a new trial based on that modified interpretation or reversal.

In addition to the attorneys' fees and other incurred costs, litigants also pay heavy business costs due to this uncertainty. For example, litigants may experience escalated business costs because of delayed product launches and decreased productivity, which arise from distracted key employees, who must focus on litigation instead of their business.

Interlocutory appeal will bring more certainty to claim construction to help each party more accurately evaluate its settlement position, which in turn will lead to earlier settlements and fewer suits in the legal system. Moreover, interlocutory appeal removes the undue advantage that a party who benefits from an erroneous claim construction has not only on the opposing party, but to others in the industry who fear they will be subject to the same faulty interpretation.

The Financial Services Roundtable and BITS membership believes the U.S. patent process is fundamental to a healthy U.S. economy and a robust free enterprise system, and we thank this Committee for taking up this important matter.

[The prepared statement of Mr. Cadel appears as a submission for the record.]

Chairman HATCH. Thank you so much.

Senator Leahy.

Senator LEAHY. Mr. Chairman, I am going back to the floor, so I will submit my questions. I wonder, with your permission, if I just might ask one?

Chairman HATCH. Sure.

Senator LEAHY. Mr. Myhrvold says that—did I pronounce your name correctly?

Mr. MYHRVOLD I have been called worse. Yes, Myhrvold is fine.

Senator LEAHY. OK. You said patent lawsuits are declining. Of course, Mr. Chandler said they are on the rise. Now, I would like to know who is correct, also what these suits are about. If they are legitimate disputes, then the numbers do not bother me as much. That is what I was taught at Georgetown, that is what the courts are there for. Of course, if their business strategies masquerade in

this case in controversy, that is another thing. Are they going up or are they going down? Who wants to—Mr. Chandler?

Mr. CHANDLER. The numbers that we have—and I am not sure they are inconsistent, I think they are consistent with what was in your testimony as well—there were 1,212 suits filed in 1990, patent suits; in 2004, 3,055; in 2005, 2,700, so I think the consistency—as Mr. Myhrvold pointed out, they declined from 2004 to 2005. That is certainly true. The trend since 1990 has generally been up, would be our view of how the numbers play out.

Mr. MYHRVOLD. The number of suits has gone up, I do not dispute that it has gone up. However, it has gone down in many important measures. It literally went down between 2004 and 2005, as noted, but since 1995, the number of lawsuits per patent has declined. So that means the likelihood a given patent is in a lawsuit is declining.

We should expect, if 50 years from now we have 100 times as many patents, there is likely going to be 100 times as much economic activity around it, there will be some additional suits. But since it is on a per patent basis, it is low.

The other thing is the number of suits that are filed is quite different than the number that actually go to trial, whereas 2,700 suits were filed in 2005, 107 of them actually cases were heard in court.

Senator LEAHY. Of course, settling cases is good if you really settle to the parties' satisfaction. If you are settling to pay off nuisance factor, that is an entirely different thing. If you have a true case in controversy, and the parties come together to settle, that is not a bad thing. If it reflects hold-ups, it is a bad thing. I will put my questions in the record. I was fascinated by something that Professor Thomas said about the German system—I think I am paraphrasing this correctly—that they used to have a deadline, and so a whole lot of suits got filed by the deadline. They got rid of the deadline, the number of suits went down because you did not have to worry about your rights being cutoff. Did I state that basically correct?

Mr. THOMAS. You did, sir.

Senator LEAHY. Thank you. When I was at Georgetown Law School I was not used to asking the professors questions. They usually asked me, and the answer could have been way up in the air. Here I got a direct answer. Thank you.

Mr. Chairman, thank you for your courtesy.

Chairman HATCH. Thank you, Senator Leahy. We appreciate your attention to these type of very serious issues.

Let me start with you, Mr. Chandler. One of the most controversial questions about post-grant review is whether parties should be forced to initiate an opposition proceeding during a short window of time after a patent is issued. Some stakeholders, primarily in the technology and financial services sector, suggest that it would be very difficult, if not impossible, to identify problematic patents within the first 9 or 12 months after issuance. Could you explain more fully why this is so difficult, this would be so difficult, and also any specific examples or illustrations of actual patents would be helpful as well.

And, of course, after Mr. Chandler gets his answer, I would be happy to hear from any other witnesses who would agree or disagree with what he has to say.

Mr. CHANDLER. Sir, the principal reason why a short first window would not suffice is that the ability to determine when a patent is issued, the way those claims will be applied by the patent holder in bringing an action is very, very constrained. I think Mr. Cadel referred to this in his testimony as well.

In the case of our products, there are potentially tens of thousands of patents which someone could try to say somehow applies. We have numerous pieces of litigation that we have had where there is no way, if you look at the patent, you would imagine that someone would try to apply it to the product that we have because of the way the patent was granted before in a way that referred to things totally different than what we are doing.

I will give you one example. We have one suit currently pending where a gentleman who had been involved in religious studies and in a seafood importing business, had not technical background, was receiving literature through his fax machine, and thought of a way that he thought it would improve the way fast mass fax distribution would occur. He worked with a patent lawyer, filed a patent. There's nothing in there that would make you think it would apply to anything we do or that it would have been picked up in any kind of search when the patent was issued. He eventually claimed that he had created the Internet. I think there were former Federal officials who may have a higher claim than he does to that.

Chairman HATCH. We know some around here.

[Laughter.]

Mr. CHANDLER. And yet, at this stage of the game, we are faced with having a high burden with a presumption of invalidity to try to go back and show that there was not much inventive content in what he did. And that is the problem is that if—you referred to the issue of the presumption earlier, the presumption of validity. When we look at a second window, we are talking about working immediately after a claim of infringement comes, so the defendant would have to move very, very quickly, and then having that decided by the experts with all the appropriate evidence in front of them, and without being burdened with a presumption of validity that will preclude effective review.

Chairman HATCH. Mr. Myhrvold?

Mr. MYHRVOLD. You know, I think that largely this is a cultural issue between different industries. Most tech companies that I'm familiar with—and as I say, I used to be chief technology officer of one—tell their employees not to look at patents. They have no procedure for checking patents. The reason 6 months wouldn't be enough is, if you don't read them at all you're not ever going to find out.

Now, the reason they don't do that is twofold. One is that they figure it will slow people down to worry about those things. Better to get out in the market and we'll sort out the issues later. It's a cultural thing in that there's never been a tradition of doing that.

Now, in the wireless industry, that's quite different. Qualcomm is an example of a company that is very prominent, but everyone, actually, in the wireless industry, also very high-tech, just as com-

plicated a set of products as a Cisco or a Microsoft or an Intel would create, and there they're really on top of it. I see this when my own patent applications are published. You know, 18 months after you file, the application is published. And in some areas, if the application is published, no one seems to look. And in other areas, where it's in an industry that people are really engaged with the patent system, you get pieces of e-mail or people call you up within days, weeks of a patent being published on the PTO Web site. So they're absolutely are industries that watch very, very closely.

Chairman HATCH. Anybody else?

Mr. JOHNSON. Senator?

Chairman HATCH. Yes, sir.

Mr. JOHNSON. We think there's plenty of time. We do read patents in our industries. But now that patent applications are by and large publicly available within 18 months of filing, you frequently have a year, 2 years or more before the patent issues. There's really no reason, having watched the patent application go through prosecution, that a 9-month period of time isn't plenty of time within which to put together an opposition and file it.

Mr. CADEL. In our experience, we do watch patents in areas where we can predict where they're going to come from. So we look at our competitors, for instance. That's an area where it's predictable and we know what to look for. But I have to agree with Mr. Chandler that, at least in our industry, in my experience, it is extremely difficult to anticipate how some of these patents are going to be interpreted, and it is rather routine for us to be contacted by an inventor, presented with a patent and the claim that we're infringing it, and we look at it and in all candor have no idea where this thing might apply in our business.

And, you know, maybe that's because we run everything from—on just the technology side, everything from the ATM machine that you're getting cash from all the way through our settlement systems, all the way through systems that have to price complex derivatives in multiple currencies. But there's just a tremendous amount we're doing and there's a tremendous amount of vagueness, frankly, in a lot of the patents that are being issued. And for us to make that connection within a year is just difficult.

The other question, just to address what Mr. Johnson said, is that we find that a lot of patents are filed with requests for confidential treatment. So a lot of the patents that we've seen issued we haven't had notice of within the 18-month publication period, but in fact we don't hear about until they're issued.

Mr. THOMAS. Senator, if I may. Let me simply note I'm somewhat skeptical that this is a matter of tradition and culture and some industries are very vigilant and others are just lazy and they deserve the results that they get. The fact is, in certain industries—and chemical and biotech are among them—there's a standard nomenclature. We use a standard Geneva nomenclature to describe small molecule chemicals. So when you read the claim on the patent, there it is. Now, it's not always like that, but there's much more of a standard in nomenclature. Finance and business software, there's much less of a standard nomenclature.

And again, let me remind you, as some of the witnesses have already said, this is a private regulatory environment of enormous complexity, with 3,000 to 4,000 patents issuing every Tuesday and that number growing month by month. So to impose a burden of observation, it's an incredible burden even for those patents that are published prior to grant.

Thank you.

Mr. JOHNSON. Senator?

Chairman HATCH. Mr. Johnson.

Mr. JOHNSON. Speaking as someone who is in the biotechnology industry, I'd like to point out that there's anything but a standard nomenclature relating to biotechnology inventions. And in fact, early on in the biotechnology development, there were issues of description that had to be sorted out and regulations and approaches developed. But they were indeed developed.

The patent laws require, under 35 U.S.C. Sec. 112, that the applicant for a patent provide a written description of his invention and, further, that he particularly point out and distinctly claim that which he regards to be his invention. And that requirement is one which should be enforced in the Patent Office, and is, and in the courts as well. Indefiniteness is a reason to invalidate a patent claim. If the argument is that the courts aren't doing their job on invalidating patents because they're indefinite or there is no written description, or the claiming isn't sufficiently definite, the cure is not to institute additional proceedings or engender hostility toward the system overall, it's to reinvigorate the Section 112 standards that should apply.

It was always understood as part of the patent grant that the reward would only come to those inventors who would disclose their invention. The reward is not just for inventing. The reward is also for disclosing the invention so that others may garner information that will help them in their own endeavors, albeit perhaps not commercial ones until the patent expires.

Mr. CADEL. Chairman Hatch, maybe just one more thing. If it would be helpful to you, we'd be happy to submit some patents that we've been presented with, so that you can see the exact challenge that we're up against in trying to—

Chairman HATCH. It would be helpful if you would do that.

Now, Mr. Johnson, in your testimony you seem to make the point that having a second window undermines the public interest, as I see it, in two ways, the way you seem to say. First, you argue that it would reduce incentives to bring a challenge in the first window. That's delaying the invalidation of defective patents. And second, you say it would create uncertainty for the patentee, which decreases the patentee's incentive to invest in commercializing an invention.

Could you just expand a little bit on these points? And specifically, why do you believe that having a limited first window is the most appropriate way to create incentives for earlier preemptive challenges. And also, since the court could make an invalidity determination at any time during the life of the patent, why would having a second window substantially increase the uncertainty for patentees?

And of course after Mr. Johnson gives his answer, I would be happy to get some others.

Mr. JOHNSON. Well, I think on the first point, Professor Thomas has given me a tail wind by pointing out that the German experience was that people who had oppositions, if there's one window, will file them before the time limit expires. Indeed, if you are aware as a competitor of a piece of important prior art, a patent or a publication that might invalidate a patent, and you know that you can sit on your hands for as long as it takes until someone happens to charge you with infringement, why in the world would you begin an opposition procedure? In your mind, you have in essence a personal defense to the patent.

And so you'll let the patent stay out there, where it may chill the competitive activities of others. That's the best of both worlds for the person who knows of such prior art. But it's not the best result as a matter of public policy.

For areas where people do read patents and do adjust their behavior accordingly, if there is an invalid patent that's issued by the Patent Office, we want it to be removed. That way, other people, who are designing their research and development activities and deciding what new products can come out, can do so with a fair understanding of what the patent landscape will be.

We will never know, in a situation with a second window opposition proceeding, how many drugs weren't developed, how many other important products weren't developed because someone, in essence, suppressed a piece of prior art waiting for a second window in the event they should ever have to use it. So I feel very strongly that the public interest should be to encourage immediate presentation of all prior art.

Now, as a practical matter, patents do more than simply reward the invention by the grant of a patent. In today's world, an increasingly complex technological world, it takes millions to hundreds of millions to a billion dollars or more to develop some inventions for market. That's certainly commonplace in the pharmaceutical and biotechnology areas. Calculations are made when people decide whether or not to fund these development programs as to what the technical risk is, what the patent risk is, what the market might be, and the expected period of exclusivity. And part of the patent risk that goes into these calculations is the likelihood that someone will choose to challenge the patent as invalid.

If we can move that risk forward so that people who have challenges will bring them, say, within the first 9 months after issuance, drugs which are not now developed may indeed be developed, because we will be reducing the patent risk and leaving the companies who are deciding to make the investment only with the technical risk. And standing alone, the technical risk may be tolerable. And indeed, we may find, and I expect we will find, that if patents become more reliably enforceable—and I'm talking about high-quality, valid patents becoming more reliably enforceable—that will stimulate more investment in research and development, which is much needed in many areas, not just in the health care area, but in many areas that are important to this country.

Chairman HATCH. Anybody else?

Mr. CADEL. I mean, just on the question of why would you bring an opposition in the first window, I think there are a few things I'd like to raise. One is we suggested we think there should be an escalating burden of proof in a second window. I think everyone—it sounds like everyone can agree that you want as much brought in the first window as possible, so there should be things to encourage that.

I have to disagree with the contention that sitting on prior art is the best strategy. We, too, spend a lot of money in research and development and putting out new products. We spend a lot of money in marketing. It's really not in our best interest to play legal chicken and have this piece of prior art sitting in my desk and, you know, hoping that if there's a challenge brought to a patent that I'll be OK under that. My preference would clearly be, if there was a good opposition proceeding, to take that prior art, challenge it, get the patent off the table so I can go ahead and market and just win in the marketplace as opposed to have to have that worry hanging over me.

The second point that was raised is on the question of the importance of getting more certainty behind your patents. It's been raised in the context of raising money. Obviously, as an investment bank we spend a lot of time, and I personally spend a lot of time, looking at companies that we're either going to invest in or we're potentially going to buy and looking at their patent portfolio. And as you mentioned earlier in your statement, there is no guarantee ever of clean title or quiet title in a patent. It's always subject to an invalidity challenge as a defense in litigation.

So the idea that having a first window then gets rid of that, I think, is false. What we find in the investment community is there's a very big difference between the presumption of validity that you have in the courts and a presumption of validity in the marketplace. There is no presumption of validity in the marketplace. If a company comes to us and they have a patent portfolio, we don't look at that and say that's great, this is definitely 100 percent, we have this market locked up. We look at things like was this patent ever challenged. Was it challenged in court—that's great. Was it brought up through the appeals process in the Patent Office.

All these things strengthen the patent, and I believe that throughout the life of any patent you're going to have challenges. It's important to be able to have those challenges and to make sure that the patents you have outstanding are still valid, but there shouldn't ever be a point in time where we say this patent is valid and there's no further challenge to it. And I don't think the markets require that.

Mr. MYHRVOLD. You know, if you look at the set of legal articles that lawyers have written about patent litigation strategy, you'll discover an overwhelming number of them explicitly recommend, if you've got great prior art, you probably don't want to put it into one of the existing procedures. It literally is the advice. I've been given that advice by attorneys when we were at Microsoft—you know, no, don't start the reexamination because—It's streamlined, but if you really care about whether you win or lose, the difference in cost isn't worth the difference in potential outcome. So most trial

attorneys, not surprisingly, will recommend you wait for a trial. That's what they're good at.

So I think that this issue of people sitting on the best prior art absolutely exists. And I know personally of many cases where people do that. If you look online at people's strategy papers, they explicitly say it.

Mr. CHANDLER. Mr. Chairman?

Chairman HATCH. Yes.

Mr. CHANDLER. I think it's important to go back to the first principle, which is what we are seeking is to have a fair and level playing field to assess the quality of a patent and to assess its patentability. The court system does not provide that because of the presumption.

I think what Mr. Myhrvold has just referred to advice to avoid the existing procedures is exactly the case that's being made for a new procedure. Mr. Johnson in his written statement referred directly to the various types of challenges to patentability that are not currently permitted in the ex parte process. It doesn't cover indefiniteness of claims. It doesn't cover best mode. It doesn't cover enablement. It doesn't cover prior sale. So I would agree completely that the existing processes are not a desirable place to go.

Unfortunately, it's a rock and a hard place for those of us who would not have the ability, as Mr. Cadel pointed out, to readily determine on a consistent basis what patents might be asserted against our products at the time the patents are issued. And that's why we seek a short, speedy, and not expensive process when we're on notice of infringement to go have experts at the Patent Office, with appropriate evidence, take a fair look at any patentability issues that might arise.

Mr. THOMAS. Senator, if I may, I think the issue before you is whether we ought to encourage prompt patent challenges through the Draconian sanction of disallowing individuals from bringing them at all. Fifteen months seems like a fairly short period of time in the 20-year patent term. Again, when the United States stands apart from patent-granting jurisdictions which usually invite comparison, I think we ought to ask why are we somehow limiting the right of members of the public to challenge these important rights.

Again, patentees traditionally have enjoyed, since the 19th century, the ability freely to amend their claims at the Patent Office throughout the entire term of the patent. The issue is whether third parties should face the same restrictions. It seems to me 15 months is already a considerable restriction.

Mr. MYHRVOLD. Mr. Chairman, do you wish to hear one last word?

Chairman HATCH. I will hear one last word, then I have another question.

Mr. MYHRVOLD. First of all, we're not proposing that members of the public can't freely challenge patents using other procedures, such as inter partes or ex parte reexaminations. But the more expanded provisions in an opposition proceeding, we are suggesting, should be done right away. This is especially true because they relate to issues which should be apparent on the face of the patent. If you can't tell, for example, what the patent is claiming, as Mr. Chandler has suggested, you can tell that by looking at the patent

and you can bring your opposition immediately and get it taken care of.

But why are we doing this? Why are we worrying about this? It's because of what Mr. Myhrvold, Dr. Myhrvold, suggests, which is it is important for our society to provide a reliable patent right if we want science and technology to move forward. And that is, after all, the primary purpose of the patent system.

Chairman HATCH. Well, thank you. Let me just say, in his written testimony, Mr. Myhrvold notes the perceptions vary about what constitutes a so-called patent troll and comments that it is all but impossible to pin people down on exactly what a patent troll is. I myself refer to them as good patent trolls and bad patent trolls. And I have to admit this may not work. I have to admit that I have had the same experience as we have looked at these matters.

So in hopes of clarifying the issue, let me just address this question to each one of the witnesses. We will start with you, Mr. Chandler. Exactly what is a patent troll. Just give us the best shot you have, OK?

Mr. CHANDLER. OK, I don't—I didn't coin the term. That derivation is elsewhere. I really don't find it a useful category for addressing the issues. I think what we have is a setting where, for a number of reasons largely due to recent court decisions, the patent system now creates a huge amount of leverage through litigation and the threat of litigation. And when parties choose to try to receive fees for their patents based on the fact that a validity challenge will be very hard to do, based on the fact that it can be made to apply to the entire value of a product when in fact the inventive contribution seems to be very, very small, until the decision last week an almost automatic injunction would issue, when it's routine to try to seek treble damages.

When those are the bases for which a claim is made for very large fees, I think that's what's given rise to the use of that terminology. But the issue isn't the nature of the parties themselves that come in. It's that we have a system that encourages that kind of conduct, and I think that's what the Committee can do, is take a large step toward making sure that when patent licensing negotiations occur, they're based on the economic value of the patent rather than on the ability to utilize the litigation system to change the equation.

Chairman HATCH. OK, Mr. Chandler. Mr. Johnson?

Mr. JOHNSON. I don't use the term, but as I understand any proper use of it, it would pertain to people who have frivolous lawsuits who use the threat of patent enforcement proceedings and the specter of the costs that are included in those proceedings in order to coerce settlements, which settlements are typically defined based on being a proportion of what it will cost to defend and to go ahead and win the case. To me, that is an abuse of litigation and one which we should remedy if we can.

But what I do not find as a patent troll is someone who has a meritorious claim and who has found that someone is infringing their patent, and who wins in court and, as part of winning in court, expects to receive either a fair measure of damages or an injunction, or both. Those people are legitimate inventors who deserve not to be labeled as trolls.

Chairman HATCH. Thank you. Mr. Myhrvold?

Mr. MYHRVOLD. You know, the term “patent troll” was originated, actually, by an Intel employee who now works for me, to define exactly the case that Mr. Johnson had said, people that were taking patents and coming and offering a settlement so cheap that it was never going to be adjudicated. And so they had a bogus claim, but it was so expensive to call them on the claim being bogus that it never is adjudicated.

In addition, I would add to that people that manipulate the system in ways that are really beyond what it was originally intended. There’s a famous case of an inventor who had patents that stayed 40 years in the Patent Office, and through that incredible set of loopholes that he was able to do that, was able to get a patent that had a 20-year life starting in 1994 even though he’d filed it in 1954. There are a few cases like that. There’s very few cases like that.

Instead, the term has been corrupted to be used as someone you don’t like. And it’s been associated particularly with people that haven’t been successful in the market. A very common case is a young company gets venture financing, they think they have the world by the tail, they work very hard. Turns out they are a little bit optimistic about timing or they try something a little too hard. Later on, the company says, well, we innovated, we were the first there, we genuinely invented, isn’t it appropriate for us to get compensated by people who later came along and squatted on our property.

I don’t think there’s anything wrong with that either in terms of the outcome—I don’t think it’s proper to be able to take other people’s property without paying for it. I don’t think that’s outside the intent of the Constitution, as Senator Leahy read. It’s to promote people in fact benefiting from their inventions. It takes a huge amount of risk up front to pay people without knowing what on earth they’re going to invent.

I started Microsoft Research at Microsoft, which is the only really large computer science research laboratory of its type started in the last 25 years. Very difficult to convince the Microsoft board that it was sensible to pay up to—I think they’ve got up to 700 researchers now—to pay all the salaries and all the costs without having a concrete idea of what you’re going to get back. Anything that closes the loop and bring merit back into the thing so that people who are successful get paid makes it easier to make that investment.

Mr. Johnson talked about that in terms of the business calculations in a pharmaceutical companies—the technical risk, the patent risk. That’s one aspect of it, but the same decision is made by independent inventors. Should I risk my time, energy, and money to create something really new. And if you do, I don’t think there’s any issue in the system with you benefiting from it.

Mr. THOMAS. In my opinion, a patent troll is an entrepreneurial speculator who, animated by the high transaction cost of resolving patent disputes, attempts to exercise hold-up rights against established industries based upon patents of dubious merit. I agree with my predecessor speakers, though opposition systems may be animated or you may be inspired by trolling practices or putative troll-

ing practices, I think the challenge before you is to develop a robust opposition system that's useful against all manner of patentee by all sorts of industry to lower those transaction costs of patent disputes.

Mr. CADEL. This is definitely a question where going last doesn't leave me a whole lot to say. Most days it just feels like "anyone who's suing JP Morgan Chase."

[Laughter.]

Mr. CADEL. But generally, I think I agree with everything that people said. There are some cases where there are very clearly people who are gaming the system, but I think those are the exceptions. I think most of the time there are legitimate reasons and I think what we're all trying to do here and what we really appreciate you trying to do is close up those loopholes so that those who are trying to game the system can't.

Chairman HATCH. That was a pretty honest answer, really. All of you gave good answers as far as I was concerned.

And Professor Thomas, in your written testimony, you refer to the lack of incentives to adjudicate patent validity as a public goods problem and suggest that—at least, I interpret it this way—that some sort of a bounty is needed to create sufficient incentives to bring challenges. Two things that have been discussed in terms of providing such a bounty are attorney fee shifting, and allowing the presumption of validity to attach only once a patent has survived a validity challenge.

In your opinion, would either of these options work? If not, what type of bounty do you have in mind?

Mr. THOMAS. Well, I favor both of those proposals, although I suppose I'm more inclined toward attorney fee shifting. We do that in the Copyright Act, we do it in a number of other areas of law, and I think that might be the most appropriate way. Also, out of sympathy to individual inventors and smaller firms, this would allow a more equal playing field between larger and smaller companies, because a smaller firm that has a meritorious claim can effectively be financed to pursue that claim and act as a private attorney general.

I'm less inclined to the presumption of validity until it's already been tested, although I'm eager to hear more about that proposal. That was essentially a situation that existed prior to the existence of the Federal Circuit. And although many of us have concerns about viewing infringement as a public service, regardless of how many of us believe the eBay case was correctly decided, nonetheless I think there was a presumption of administrative regularity that ought to be weighed, whether we detract from it.

I propose that simply the patentee pay a cash bounty to any successful challenger that defeats one of its claims. I believe that that cash payment system would refine the ability both of patentees to file claims and also incent individuals to challenge those claims.

Thank you.

Chairman HATCH. All right. Mr. Myhrvold, let me ask you this question. In your written testimony, you seem to make the point that the reexamination procedures may be a more appropriate model for post-grant review than the adversarial proceedings that are favored by others. You also argue that a more robust system

of post-grant review might be subject to abuse and could encourage strategic behavior by defendants in litigation.

I would like you to expand on these points and, in particular, how do you think some parties might use a second window either to delay final judgment in court or to exert leverage on existing—well, in licensing negotiations. And also, is there some way to prevent these types of abuses? I would like to know that.

Mr. MYHRVOLD. Well, I think the first thing is that the *ex parte* and *inter partes* reexamination procedures actually are enormously successful. Some people have an attitude that they're a niche or that they're barely used. As I discussed in my testimony, *ex parte* is used about five times more than the court system is.

Also, following up with something that Professor Thomas said, reexamination procedures don't stop if people settle. If you start one of these *ex parte* reexamination procedures, it will follow through even if the parties have settled. So it does get the bad patents off the table.

Inter partes is a much more recent thing. It didn't really become feasible until changes to the law in 2002, so it has only been a couple of years. It only applies to patents that were filed after November 1999, so many of those patents haven't even issued yet, or some of them haven't. So it's a very small population of patents on which these things, the *inter partes*, could actually apply.

Nevertheless, I think they're both very successful. They're successful because they're doing something different than trial. They're not a one-to-one substitution for a trial. *Ex parte* is simple and it's inexpensive; that's also the drawback. Because it's simple, there are lots of things you can't raise. In particular, the party bringing it can't continue to participate and make further arguments. But it's very, very successful in terms of having a way for people that don't have those kinds of resources or interests to fire off a salvo that could invalidate the patent.

So as we look at how we create a new mechanism, why would we create a new one? What would the reasons be? Well, the normal logic is to say we'd like to decrease the number of litigations. Well, in order to decrease litigation, you have to motivate a party who's afraid of a patent to say I have a better chance of doing it in this new method versus trial. And at trial I have the full range of opportunities of discovery and arguments and oration and the entire legal tradition. That's why it's expensive and difficult and time-consuming. But you have that full option. So most attorneys would say, look, if you really care about winning or losing, and it's a very serious issue, you probably want that full scope of things at trial.

So as a result, there has been a progression both in this country and overseas of creating opposition or interference or post-grant review—in a general sense—proceedings that keep adding one more piece of what a trial is. And the argument is always, OK, let's have that one more piece, and if we get that one more piece, OK, that will be enough. But I don't see any compelling argument as to why it will be enough and why you won't just create, if we keep this notion going, why we won't have four or five of these procedures at some point in the future, each one trying to bite off a little bit more of what's in a trial.

Now turning to your issue of the abuse question. These proceedings have a fundamental difference from a trial. The difference is that the patent holder has everything to lose and the other side, the challenger, has nothing to lose. In a trial for infringement, you're going to consider multiple questions—validity, enforceability, and the actual facts of infringement. So if the trial goes one way, one party wins; if it goes the other way, the other party wins. This is a way of creating a forum in which only party can lose, and do it as a delaying tactic which is likely to take a couple of years.

It's very hard to believe, unless we did some quite miraculous thing, that a complicated second window scheme—by “complicated” I mean with more features than today's inter partes scheme—that such a scheme could be done in less than a couple of years. Which means you've got the opportunity—And then there's also appeal. The inter partes has the right to appeal to the Federal Circuit. So you could potentially take a multi-year proceedings against the patent holder which, even if they all fail, delay them enormously before they could start a trial where both sides have skin in the game.

And, you know, this isn't a theoretical worry here on my part. Again, if you look at the advice that lawyers give their clients or the articles that they write to their clients, many of these issues are discussed. As I mention in my written testimony, besides sitting on prior art it's not uncommon for someone that has a special piece of prior art to just say, well, give me a cheap license and I'll stay quiet.

So I think you have to view all of these systems as being a very complicated set of checks and balances. There are motivated adversaries on both sides. It's very, very difficult to come in with a mechanism that keeps those things even-keel. You know, today we have the three methods—trial, inter partes, and ex parte. And before we go and add some additional one, let's be clear on what it's going to be.

Finally, to return to what I started with, it's unrealistic to think that one of these mechanisms is going to obviate trial in a large fraction of cases. It may take some of the cases away, granted. Most likely, what a new post-grant opposition procedure does is it provides a voice for someone who couldn't get a trial. Now, that may be a very valuable thing. But let's not confuse ourselves that if we get the right mechanism, the number of trials will go down. Because trial lawyers, acting in the best interests of their clients, are often going to tell them, look, I want the full set of procedures available in trial, that's how I can best defend you.

Chairman HATCH. Mr. Cadel, let me just ask you this. In your written testimony, you suggested an interlocutory appeal of a district court's *Markman* decision should be allowed. It seems to me that somewhat the same interest of creating additional certainty could also be achieved by increasing the deference, you know, given to the trial court. For example, some have suggested making claim construction a mixed question of law and fact.

Could you expand a little on why you believe the interlocutory appeal would be beneficial? And when you have answered, I would be happy to hear from anybody else on the panel who cares to comment.

Mr. CADEL. Sure. I think this goes along with another suggestion I made in my written testimony, where we think that specialized district courts for patent cases would also be helpful. And fundamentally, the creation of the Federal Circuit reflects the general feeling that the patent law is a very complex, technical area and specialization is helpful. I think why I would prefer to see the final decision on *Markman* made at the Federal Circuit level, as opposed to giving more deference to the district court, is I have a higher degree of confidence that the Federal Circuit is going to get it right.

The reason I believe that interlocutory appeal is very important is for the reasons I stated in my testimony, it's such an important decision and it happens so early on in the case that what you effectively have is a litigant—and this could be for plaintiff or defendant. I don't think it skews one way or the other. But where you effectively stand is the *Markman* hearing is made and the decision of what the patent means is now decided. And you have to go to trial based on that even if, as a litigant, you believe that that's wrong. So you're now faced with a kind of Draconian choice of do I go ahead and kind of roll the dice and say I think this *Markman's* wrong and I can overrule it on appeal, or do I settle early and basically do I at that point settle and pay money to someone who's patent I believe is either—I believe I'm not infringing.

So that's really not the kind of situation you want to put litigants in. It's not something that helps settlement and it's not something that helps the system. Where an interlocutory appeal is very helpful is you get that decision before the Federal Circuit, who I believe is in the best position to make the correct decision. That decision that comes down, I believe, should be law of the case. We don't think that it's something that, you know, you should then get to go and reappeal. But armed with that decision, both sets of litigants know where they stand, and I think it does help to create a better settlement situation, where you're—you know, the more information you have, the more certainty you have, the more confident you are—a settlement is just like any other investment, and the more confident you are in making that investment.

Chairman HATCH. Anybody else?

Mr. THOMAS. Senator—

Chairman HATCH. Let me ask one last question, then. Oh, I am sorry. Professor—

Mr. THOMAS. Oh, I apologize, Senator.

Chairman HATCH. Oh, that is fine. I am happy to hear from you.

Mr. THOMAS. One concern I would have about a specialized trial court for patent matters is that you would have the vast majority of patent cases would not interact with the general judicial system at all. We've just heard from the *eBay* case that—

Chairman HATCH. You think that is bad?

Mr. THOMAS. I think that's bad, as it's just been reminded with the *eBay* case that the patent system is part of a larger jurisprudence. It's part of an jurisprudence of competition, of evidence, of procedural law. And isolating it may not always lead to the best results. Having interaction with a general purpose trial court and a specialized appeal court at least allows more mainstream notions of coming from jurisprudence to interact with the patent law. I think one way to split the difference would be to consider mag-

istrates or special masters in patent cases and provide a program that would pursue along those lines. I'm also sympathetic to the notion of interlocutory appeal, but I would note that of course a lot of jurists don't hold a *Markman* hearing early in the trial; they hold it rather later. So I'm not sure those benefits would necessarily accrue in every sort of case.

Thank you, Senator.

Mr. MYHRVOLD. You know, just to differ with Professor Thomas on the specialized court issue, I think we have to understand that any really interesting and complicated post-grant review thing is another kind of a trial. OK? That is what you're creating and it is separate from ordinary jurisprudence. So you can do that inside the Patent Office and say that's a special branch of the executive that is going to do this thing that's like a trial and maybe it's got discovery but maybe it doesn't have everything, and then go later. Or you can decide up front that you're going to go and put it over there, as has been done in both tax and bankruptcy matters. And I'm sure there are other examples as well.

So the issue that he brings up is an interesting issue, which is how does it interplay with the rest of the jurisprudence. Of course, the Court of Appeals for the Federal Circuit does hear more than just patents and the Supreme Court is still the ultimate arbiter, as it was in the *eBay* case. And I think all of those things should be preserved. But anything that winds up creating a very in-depth review process is by its nature a kind of a specialized court. The question is do you run it in parallel with existing Federal district courts, so that you have two parallel systems you have to manage in sync, or do you try to have one?

Mr. CHANDLER. Senator?

Chairman HATCH. Yes, sir?

Mr. CHANDLER. I think that the importance of coordination of the litigation system was well illustrated by the *RIM* case, where, while the Patent Office was in the process of invalidating the patents involved, RIM was facing the possibility of injunction in that case and ended up paying \$600 million.

Interestingly, in a meeting in this building, I was asked once whether RIM really hadn't made a big mistake by just paying \$24 million when they had the chance to do that and make the case go away. I would say as a general counsel of a technology company, it's very, very hard for me to ever say I want to pay anything to someone who has patents that I believe are invalid. That's why we seek this kind of mechanism. Mr. Myhrvold referred to the importance and saying it's very hard to find a mechanism that keeps an even keel, in describing the success in some areas of the existing processes and also their failures. And that's really what we seek, is to try to keep that kind of even keel so that you aren't faced with being told that because of litigation leverage and lack of coordination between the different processes, you should pay money for something that is in fact valueless.

Chairman HATCH. OK. Let me ask one last question, and that is in the *eBay* case, the Supreme Court recently handed down a decision involving the standard for obtaining injunctions in the district court—which I think has been one of the most controversial issues debated in the context of patent reform. I would just personally like

to hear from each of you your views about what practical effect the *eBay* decision will have. And perhaps more importantly, I would like to know whether, from your individual perspectives, the Supreme Court's ruling affects patent reform legislation.

Mr. Cadel, we will turn around and start with you and work through the rest of the panel.

Mr. CADEL. Thank you very much.

No, we think the *eBay* case and the Supreme Court got it exactly right. We're very pleased with that. We expect that, and I think you see this in some of the concurrences, particularly in Justice Kennedy's concurrence, I believe it was, that the real issue is going to be how you look at companies that are only seeking monetary damages. I do believe that there is a distinction between a company that is enforcing its patent in a circumstance where it's trying to protect a marketplace, trying to protect its market position, and a circumstance where they are seeking only monetary damages. And in the case where they're seeking only monetary damages, it's a little harder to justify the old rule that they're entitled to an automatic injunction. So I think that this is going to help in that balance and where only monetary damages is sought. Hopefully, practicing companies will be under less of a threat that they're going to be shut down and can pay, you know, an appropriate value for that invention but not have the veritable gun to their head.

Chairman HATCH. Professor Thomas?

Mr. THOMAS. I also agree. I believe that the Supreme Court got it right. I enjoyed reading the opinion. I was pleased that the Supreme Court articulated the appropriate factors. I believe it's largely business as usual for the patent system, but there will be a handful of cases involving system claims and the entrepreneurial speculators I spoke of previously where results might differ. I think that will have a positive effect both in the courtroom and the board room.

Thank you.

Mr. MYHRVOLD. It's sort of interesting that I both agree and disagree with these guys, and that's sort of the mark of an interesting Supreme Court case, is everyone can see in it something that's interesting.

My company and a set of 20 of some of the most well-known inventors in America filed an amicus brief in this case about the issue of should you have lower rights if you are practicing your invention versus you're not. We feel strongly that any inventor should have the same set of rights, so I disagree quite strongly with what Mr. Cadel said, that a company that practices products ought to be put in a different level.

That said, I don't think that this case actually harmed that principle, so we actually were pleased with the outcome of the case. It suggested that there is a four-factor test—or not suggested, it mandated the four-factor test, which many people from our perspective thought was a fine result.

At the same time, it did not, absolutely did not say that there was a rule, as *eBay* had asked, that in fact people that don't practice the product be disenfranchised. And the original district court ruling, which had not given an injunction to Mercexchange, on sev-

eral bases, wasn't upheld. It has been remanded back with a different standard.

I think the thing that's slightly disappointing about this decision for everyone is that there's very little guidance that the Supreme Court gave on some of the really key issues in the case. So yes, the court was remanded to use a four-factor test. Exactly how you're supposed to do that, or how it was in this case, the decision was silent on.

Mr. JOHNSON. We had also urged the four-factor test be used in our amicus brief. And there's certainly something for everyone in the opinion. I think the more interesting question is whether it removes from your plate the question of whether to include any type of injunction language in patent reform legislation and, from the written statements, it would appear that there seems to be some consensus that we should let the courts go about their business now and see how it turns out. I would agree with that.

Mr. CHANDLER. We believe the Court decision did remove one of the in terrorem elements of style of patent license negotiation that is applied by a lot of entities these days. On the other hand, it will put pressure on some of the other elements. There's a good question as to whether it will lead to an increase in forum shopping due to the discretion that's accorded to the trial court. And I think it points to the fact that it's important for you and the Congress to followup to make sure we address each of those elements and establish a level playing field and really return to the traditions that we had of fairness in patent adjudication before recent decisions unlevelled the playing field.

Chairman HATCH. Well, thanks to you all. I don't know if we could have had a better panel than this panel. You haven't resolved all our problems for us, though, and if anything, you've made them more complex for us. We have been trying to find some simple way of solving all these problems and pleasing everybody and, as you know, there is no way we can do that. So what we have to do is sift through all this and see what we can do to try and be fair but yet honest and decent, and hopefully we can come up with something that will be acceptable to most people. But we appreciate your help, every one of you. You are brilliant people and this has meant a lot to me, this hearing.

So I just want to thank you once again for appearing and for taking your valuable time and helping to try and help us to be able to get it right. So we will see what we can do, and we hope we can get some legislation that will help to resolve some of the difficulties that you have mentioned here today. We will do our best to do that.

So thanks so much. With that, we will recess until further notice.

[Whereupon, at 3:43 p.m., the Subcommittee was adjourned.]

[Questions and submissions for the record follow.]

QUESTIONS

Senator DeWine
Perspectives on Patents: Post-Grant Review Procedures and Other Litigation
Reforms
May 23, 2006
Questions for Witnesses

These are DeWine follow up questions for the post-grant opposition proceedings hearing:

(All): Are you more often a defendant in an infringement suit or a plaintiff attempting to bring an infringement suit? Also, compare the resources you devote to research to ensure you are not infringing someone else's patents to the resources you devote to fighting, and separately, bringing forward, patent infringement lawsuits.

(Johnson, Myhrvold, Chandler): Have you noticed a marked increase in the resources you need to devote to this issue over the past decade?

(Myhrvold): Explain what role patents serve for attracting investor financing, and whether or not patents are significant in securing this financing.

(Johnson, Thomas, Myhrvold): Mr. Cadel and Mr. Chandler both suggested that a second window would be useful for ensuring patent quality after a first window has ended, since there are patents for which the scope, utility or commercial viability are not immediately obvious. For these kinds of patents, as Mr. Cadel put it, a potential infringement defendant may not know what a patent owner intends the scope of the claims to be until the patent owner brings an infringement suit. If a second window were not allowed, how should the patent system ensure patent quality for these types of patents?

(Cadel and Chandler): How would you resolve the concerns expressed by some industries that a second window would create excessive uncertainty in patent value?

SUBMISSIONS FOR THE RECORD

TESTIMONY of
 Mr. Andrew Cadel of JP Morgan Chase
 On behalf of
 The Financial Services Roundtable

Introduction

Chairman Hatch, Ranking Member Leahy, and members of the Subcommittee, my name is Andrew Cadel. I am a Managing Director, Associate General Counsel and Chief Intellectual Property counsel at JP Morgan Chase and I am pleased to testify today on behalf of The Financial Services Roundtable and BITS, which are affiliated financial services trade associations.

The Financial Services Roundtable (www.fsround.org) represents 100 of the largest diversified financial services companies providing banking, insurance, and investment products and services to American businesses and consumers. Member companies participate through their chief executive officer and other senior executives nominated by the CEO. Roundtable member companies account directly for millions of jobs.

BITS (www.bitsinfo.org) was created in 1996 to foster the growth and development of electronic financial services and e-commerce for the benefit of financial institutions and their customers. BITS provides intellectual capital and addresses emerging issues where financial services, technology and commerce intersect. BITS's Board of Directors is made up of the Chairmen and CEOs of twenty of the largest U.S. financial services companies, as well as representatives of the American Bankers Association and the Independent Community Bankers of America.

As you know, the financial services community is intensely interested in patent quality and litigation issues, and is grateful that you are considering these matters.

It is, perhaps too easy and convenient to place the entire burden for patent quality on the staff of the U.S. Patent and Trademark Office ("PTO"). We believe that Commissioner Dudas and his staff continue to perform admirably to overcome the challenges facing the PTO including reducing the backlog of pending applications. However, the fact remains that over 800,000 applications¹ are pending at the PTO and Examiners are unable to spend enough time to provide a meaningful examination on complex applications.² As a result, patent quality has suffered, and patents of dubious quality threaten to injure inventors, licensors, licensees and to disrupt lawful economic activity.

My testimony will cover needed improvements in the areas of patent quality, including our strong support for disclosure of relevant prior art, a post-grant opposition proceeding with two windows, and an interlocutory appeal of Markman rulings. I also want to emphasize our support for needed changes in the litigation landscape including appellate procedures and the ways in which damages are calculated.

¹ U.S. PATENT AND TRADEMARK OFFICE, PERFORMANCE AND ACCOUNTABILITY REPORT FISCAL YEAR 2004, available at www.uspto.gov/web/offices/com/annual/2004/060405_table5.html (last visited April 27, 2005).

² FEDERAL TRADE COMMISSION, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY, A REPORT BY THE FEDERAL TRADE COMMISSION, October 2003, at 5.

The system for granting and adjudicating patents can be improved by (1) creating a meaningful opposition proceeding with two windows, (2) establishment of an interlocutory appeal for Markman rulings, and (3) ensuring that meaningful prior art is disclosed to the PTO early in the application process. In addition, there are various other provisions that can be adopted which will make our patent system an effective and efficient mechanism that fosters economic growth.

Opposition Proceeding

The PTO proposed a post-grant review of patent claims in its 21st Century Strategic Plan that was released in 2002. We strongly support establishment of an opposition proceeding with two windows.

With respect to the first window, we recommend that the opposition procedure allow the public to petition the PTO to cancel one or more claims in a patent within 12 months of issuance. The counterpart U.K. opposition law provides for an opposition proceeding within 24 months after the date of grant,¹⁴ but the European Patent Convention opposition period is only 9 months.¹⁵ We respectfully suggest the creation of a reasonably moderate time frame of 12 months.

With respect to a second window, we recommend allowing anyone who is threatened with a patent infringement action to file a request for an opposition proceeding within six months after receiving notice of the patent infringement action. Without the six-month window for initiation of an opposition proceeding upon a threat of patent infringement, the opposition proceeding would not achieve its goal of significantly improving patent quality by having suspect patents reviewed. In the United States, financial institutions currently have no infrastructure in place to monitor patents in time for parties to fully take advantage of the first window. As many products and services today integrate multiple technologies it will be difficult, if not impossible, to monitor all the categories necessary in the time allotted for the first window. Further, the public often does not truly know what the patentee intends the scope of the claims to be until that patent is enforced. We respectfully submit that it is not reasonable to expect businesses to review all patents issued within a year of their issue date, determine every possible interpretation an inventor may ascribe to the claims, identify those of suspect validity, and undergo the expense of attacking all of those that may be applicable and suspect during a first window.

For both windows, launching an opposition would foster a more detailed scrutiny of patents than ordinarily occurs during the typical 25 hours or less of examination at the PTO. A first window could be subject to a preponderance of evidence standard for a showing of invalidity, the second window could be generally subject to a clear and convincing standard for proof of invalidity, consistent with current treatment in trial court to foster efficient use of dispute resolution resources.

Improving Quality of District Court Patent Decisions and Interlocutory Appeal

One of the most, if not the most, important determinations in a patent litigation is the determination of the meaning of the claims. This determination takes place early in the suit during the Markman hearing and will essentially define the scope of the patent. This determination is crucial to questions of both validity and infringement. It is difficult to overstate the importance to the parties of obtaining claim construction they can rely on.

The quality of Markman decisions in district courts can be improved by allowing interlocutory appeal of Markman decisions. District court patent claim interpretations frequently are overturned by the Federal Circuit. For instance, in the period from 1996 to 2003, 35% of district court claim interpretations were overturned by the Federal Circuit.³ The inconsistent claim interpretations between the district court and the Federal Circuit are representative of how the current system has a deleterious impact on the patent system and how the current procedures create uncertainty and imbalance between the parties.

An interlocutory appeal to the Federal Circuit should be permitted after a *Markman* hearing. This procedure would help to mitigate the judicial inefficiency that occurs when a full trial is conducted based on an incorrect interpretation of the patent at the district court proceeding and the Federal Circuit then modifies or reverses that interpretation and orders a new trial based on that modified interpretation or reversal. In addition to attorney fees and other incurred costs, litigants pay heavy business costs due to this uncertainty. For example, litigants may experience escalated business costs because of delayed product launches and decreased productivity, which arise from distracted key employees who must focus on litigation instead of their business.

Interlocutory appeal will bring more certainty to claim construction to help each party more accurately evaluate its settlement position which in turn will lead to earlier settlements and fewer suits in the legal system. Moreover, interlocutory appeal removes the undue advantage that a party who benefits from the erroneous claim construction has not only on the opposing party, but to others in the industry who fear they will be subject to the same faulty interpretation.

Improving Disclosure

The application process must be reformed to ensure that relevant art is disclosed in a meaningful way for Examiners that are pressed for time. Any examination of the PTO is only as reliable as the information that the Examiner is readily able to apply to the claims under review.

In furtherance of this goal, we are quite pleased that H. R. 2795 has a third party submission procedure, which will allow for more effective disclosure of relevant prior art to the Examiners at the PTO.

³ Kimberly Moore, *Markman Eight Years Later: Is Claim Construction More Predictable?*, 9 Lewis & Clark L. Rev. 231 (2005).

Other Litigation related Issues

On the litigation side, improvements must be made in the way in which cases are tried, the types of courts involved in adjudicating cases, and remedies that are imposed if patents are found to be valid and infringed.

Patent Law Specialization in District Courts

Many district court judges have no special technical expertise, patent law experience, and very few have been admitted to practice before the U.S. Patent and Trademark Office. At law firms, patent attorneys specialize in patent matters and often hold technical degrees. The lack of expertise in the district court encourages a rush to the Federal Circuit where there is more patent expertise. Other industrialized foreign countries, such as the U.K., Germany, and Japan, have sought to remedy the problem of patent expertise with specialized patent trial courts, to much success.

As an intermediate or alternative step to a single specialized district patent court, which may require additional funding and a lengthy approval process, our proposed venue language (set forth below) encourages preferential venue in the ten district courts that currently handle the most patent matters.⁴ These ten district courts could be further reduced gradually over time to a single specialized district court to ease the transition and prevent disruptions in the flow of litigation. If venue does not lie where a defendant resides under the new definition or in the preferential district courts, proper venue is determined consistent with general venue provision under 28 USC § 1391 (e.g., venue applied to foreign corporations with only personal jurisdiction in the U.S.). The proposed venue language allows broad unrestricted venue for federally funded universities to encourage their ability to enforce patent rights resulting from federally funded research. Accordingly, the status quo is preserved with the ability of federally funded universities to bring patent infringement suits in their choice of jurisdiction where there is personal jurisdiction.

⁴ See, e.g., Kimberly A. Moore, *Forum Shopping in Patent Cases: Does Geographic Choice Affect Innovation*, 79 N.C.L. Rev. 934 (2001) (for information on selection of the ten district courts that handle the most patent matters).

We recommend replacing the current language of 28 U.S.C. §1400(b) with the following venue language to promote specialization in patent matters in 10 district courts, where 65% of patent matters are presently heard:

"Civil actions, suits, or proceedings arising under any Act of Congress relating to patents may be brought (1) in the judicial district where the defendant resides, or (2) in any of the following federal district courts where the defendant is subject to personal jurisdiction at the time the action is commenced to foster judicial expertise in patent matters: Northern District of California, Central District of California, Southern District of New York, Northern District of Illinois, District of Massachusetts, District of Delaware, Southern District of Florida, Eastern District of Virginia, District of New Jersey, and the District of Minnesota. Notwithstanding the definition of resides under 28 U.S.C. §1391(c) "resides" under this section shall mean the judicial district where the defendant is registered as a business entity, incorporated or where its principal business office is located. If the plaintiff cannot bring a proceeding against a defendant under any of the patent venue provisions of this section in a patent matter or if the plaintiff is a university or college that has received federal funding within the last calendar year, or a non-profit organization controlled by such university, then the general venue provisions of 28 U.S.C. § 1391 shall apply to that patent matter."

Notice and Remedies

One of the main motivations behind our support of patent law reform is to ensure that 1) patentees provide sufficient notice of the patent claims infringed 2) courts penalize only for actual willfulness, and 3) damages match the harm done by any infringement determined.

Specific notice of patent infringement is essential to a fair and efficient proceeding. Presently, by sending a vague letter with merely a charge of infringement and a reference to a patent number, a patentee can create the false assertion that the defendant has been notified of the details of which products and services infringe which claims. Currently, such vague and unspecified notice can also set the stage for a finding of willful infringement, which incurs treble damages. Willfulness in patent law should not be divorced from the concept of willfulness in other areas of the law, such as copyright.

Therefore we propose a standard that requires a finding of notice only if the defendant received written notice from the plaintiff of a charge of infringement that identifies the specific patent, claims, and alleged infringing products or services at issue and that is sufficient to give the defendant an objectively reasonable apprehension of suit on the patent.

⁵ Kimberly A. Moore, *Forum Shopping in Patent Cases: Does Geographic Choice Affect Innovation*, 79 N.C.L. Rev. 934 (2001).

At the same time, the Patent Act should make clear that enhanced damages should not be available with respect to any period during which the infringer had an informed good faith belief that the patent was invalid or unenforceable, or would not be infringed by the conduct later shown to constitute infringement. This informed good faith belief could be established by advice of counsel. Further, a patentee should not be able to plead willful infringement before a court has determined that the patent is valid and infringed by the defendant.

Also, damages in patent suits should in some way correspond to the amount of harm done by the infringement. Under the current precedent, potential for abuse exists when a patent claim or the true invention only covers a small component of a larger product. In such cases, damages should be apportioned in accordance with the inventive contribution of the patent claim at issue as distinguished from other features of the product, the manufacturing process, business risk, or improvements added by the infringer. For example, if an invention relates to an intermittent windshield wiper, a reasonable royalty should be based on the intermittent windshield wiper and not the entire automobile. We are pleased that H.R. 2795 has appropriate language concerning apportionment.

Venue Reform to Curb Forum Shopping

In addition we further recommend limiting patent venue to curb the abuses of forum shopping in patent disputes. In general, with appropriate exceptions, patent cases should only be brought in the venue where the defendant is incorporated or in a limited group of district courts that specialize in patent matters, as opposed to anywhere there is personal jurisdiction against the defendant. Such a venue provision would prevent forum shopping and discourage frivolous litigation in patent disputes.

Under current law, plaintiffs can sue corporate business defendants for patent infringement anywhere the defendant is subject to personal jurisdiction because of the broad judicial interpretation of "resides" in 28 U.S.C. 1400.⁶ In *VE Holding Corp.*, the Federal Circuit applied the broad definition of "resides" under the general venue statute of 28 U.S.C. 1391 to the patent venue statute of 28 U.S.C. §1400, which effectively makes the patent venue limitations of 28 U.S.C. 1400 meaningless for corporate defendants. Instead, to give effect to 28 U.S.C. §1400, its patent venue language should control over the general venue language of 28 U.S.C. § 1391, with respect to patent matters.

⁶ *VE Holding Corp. v. Johnson Gas Appliance Co.*, 917 F.2d 1574 (Fed. Cir. 1990).

Our proposed venue language limits venue to correct the broad definition of "resides" that currently allows corporate defendants to be sued in virtually any district court within the U.S. for patent infringement. The redefinition of "resides" is generally consistent with the pre-1988 standard for patent venue in which patent venue was favored in the state of incorporation or location of principle place of business. It is our understanding that such a limitation would discourage frivolous litigation. Professor Heller proposed similar venue language for H.R. 2795, which is equally acceptable to our proposal. However, any restriction of venue to reduce forum shopping should be supplemented with a move toward a specialized court for patent matters. To summarize, there are two benefits that can be gained from redefining venue: (1) limiting the applicable jurisdiction to a location that is convenient to the defending organization to discourage frivolous litigation and, (2) developing specialization and expertise in handling patent matters at the district court level, much like the Federal Circuit does at the appellate level.

The Prior User Rights Defense

The prior user rights defense under 35 U.S.C. 273 is an important protection for financial institutions especially due to the recent growth in patent litigation. However, in its current form, the prior user rights defense is merely limited to "business methods." Business methods have proved difficult to define in practice and are not defined anywhere in the Patent Act. Accordingly, a patent owner of a business method patent may characterize its business method as a system or apparatus to circumvent the application of the prior user defense. For this reason, the prior user defense should be modified to apply equally to methods and systems covered by a patent.

Another problem with the prior use defense is the high level of proof required to successfully assert the prior user defense. Currently, the prior user defense requires "clear and convincing evidence." Although "clear and convincing evidence" is generally appropriate where patent invalidity is invoked as a defense,⁷ it is not appropriate for the prior user defense, where validity is not at issue. "Preponderance of the evidence" is a better standard for a personal defense based largely on factual matters. Therefore we support amending to the degree of proof required in former Section 273(b)(4) from "clear and convincing" to "preponderance of the evidence."

Finally, the prior user right should be available to any entity that controls, is controlled by, or is under common control with the prior user. This is particularly important in the financial services industry, where companies tend to establish separate subsidiaries for the provision of new services because of the applicable regulatory framework.

⁷ Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc., 796 F.2d 433 (Fed. Cir. 1986).

CONCLUSION

The Financial Services Roundtable membership believes a properly functioning patent process is fundamental to a healthy U.S. economy and robust free enterprise system. With increases in pending patent applications and claims of infringement, we believe that the time has come for Congress to consider fundamental reforms to the patent process, with the participation of members of the financial services industry and the patent community at large.

It is in all parties' best interests to have matters adjudicated in the fairest and most efficient manner, and we believe our suggestions for litigation reform achieve this end.

We look forward to participating further as you develop and move legislation to improve the patent laws.

Testimony of
Mark Chandler, Senior Vice President and General Counsel, Cisco Systems
“Perspectives on Patents: Post-Grant Review Procedures and Other
Litigation Reforms”
before the
Subcommittee on Intellectual Property
Senate Committee on the Judiciary
May 23, 2006

Chairman Hatch, Senator Leahy, and members of the Subcommittee, my name is Mark Chandler and I am Senior Vice President and General Counsel of Cisco Systems. Thank you for the opportunity to appear before you today to discuss this important issue.

Cisco was founded 22 years ago by two computer scientists at Stanford University who wanted to exchange information between different computer systems located on the same college campus, a feat that was virtually impossible at the time. Today, thanks to the innovation of those two and many others, the globe is interconnected through a world wide web that changes the way all of us live, work, play and learn.

Originally our products were designed for communications within private or enterprise networks. When the public Internet emerged in the mid '90s, our products found immediate application for worldwide use. Networking equipment forms the core of the global Internet and most corporate and government networks. When you send an email in your office to your children or grandchildren, the digital language that makes up that email is routed through equipment made by Cisco or our competitors. Cisco makes the equipment that makes the Internet work.

Much of the value of our company rests upon the intellectual property embodied in our networking products – both hardware and software. We hold over 2,500 issued US patents and have applied for over 4,000 more. Cisco therefore believes deeply in strong protection for intellectual property. We believe that fair litigation rules are essential to allow us to protect this key element of our company's value.

So why would a company like Cisco favor rules changes that some charge would decrease the value of patents? And why would a company like RIM, creator of the Blackberry that so many depend on today for daily commerce, pay more than \$600 million to license patents that the Patent Office has said are likely invalid?

The answer to these questions is that our patent litigation system is broken.

Increasingly, companies like Cisco and RIM that manufacture products or offer services are being named as defendants in a new type of patent infringement litigation. These actions, often brought in obscure jurisdictions, virtually never involve situations in which a patentee or an exclusive licensee of the patentee seek to preclude anyone else from practicing the invention in order to retain for themselves all of the economic benefit associated with commercializing the patent. Rather, the patentee in these cases is willing to enter into licenses broadly; indeed, the patentee often sends letters to fifty or one hundred companies at a time offering to license its patent, and threatening an infringement action against any recipient that refuses to enter into a licensing agreement; one plaintiff sent such letters to 75,000 companies.¹ At least sixty-five entities claim that wireless access to the Internet can only be achieved under the “Wi-Fi” standard by using their patents.²

Justice Kennedy recognized this new phenomenon in his opinion in the Supreme Court’s *eBay* decision last week: “[i]n cases now arising . . . the nature of the patent being enforced and the economic function of the patent holder present considerations quite unlike earlier cases. *An industry has developed in which firms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees*” (emphasis added).³

When a patentee is willing to enter into a license, and the only issue is the price that will be charged for the license, our patent system should encourage negotiation of a reasonable license fee that reflects the fair market value of the intellectual property. The rules of the litigation system should not supply undue leverage to one side or the other. When that is the case, litigation will be the exception, as clearly defined rules will allow the parties to reach agreement on a fair license fee. In that environment, innovation can thrive because economic actors have a high level of certainty of their rights and obligations.

Our current patent litigation system falls far short of this standard. The litigation rules themselves encourage buying old patents rather than funding development of new inventions and innovations. These rules incentivize forum shopping and winner-take-all, jackpot-like litigation strategies, where leverage flowing from litigation standards, rather than economic value in any real-world sense, drives actions and results.

The ability to invoke the litigation system, and to take advantage of rules that tilt the playing field decidedly toward the plaintiff, greatly enhances the patent holder’s negotiating leverage regardless of the strength of either the underlying patent or the infringement claim being

¹ For example, RIM’s CEO testified that the plaintiff in the infringement action against it sent such letters to 47 companies. *Patent Quality Enhancement in the Information-Based Economy: Hearings Before the Subcomm. on Courts, the Internet and Intellectual Property of the H. Comm. on the Judiciary*, 109th Cong., (Apr. 4, 2006) (testimony of James Balsillie, Chairman and CEO, Research in Motion). Another example is “the company E-Data, which sent letters to 75,000 companies informing them that they were infringing an E-Data patent and asking them to pay royalties between \$5,000 and \$50,000. The company owns a patent which arguably covers financial transactions on the Internet. Several high-profile companies agreed to license the patent but most refused. E-Data sued forty-one of the companies for patent infringement.” Meurer, “Controlling Opportunistic and Anti-Competitive Intellectual Property Litigation,” 44 B.C. L. Rev. 509, 517 (2003).

² See IEEE Standards Association, 802.11 Patent Letters of Assurance, at http://standards.ieee.org/db/patents/pat802_11.html.

³ *eBay Inc. v. MercExchange LLC*, No. 05-130 (May 15, 2006), slip op. 2 (Kennedy, J., concurring, joined by Stevens, Souter, and Breyer, JJ.).

asserted. Rather than providing a neutral mechanism for resolving disputes, the patent litigation rules themselves are now a key means of enhancing patent value. Justice Kennedy recognized one aspect of this phenomenon, citing the leverage exercised by plaintiffs “[w]hen the patented invention is but a small component of the product the [defendant] companies seek to produce.”⁴

The prevalence of this phenomenon of using litigation rules to coerce large license payments is demonstrated by the growth in the number and scope of patent infringement claims. Nationwide, the number of patent cases more than doubled between 1991 and 2001,⁵ and have increased every calendar year since then based on the statistics released by the Administrative Office of the United States Courts – the number of patent cases in 2005 was more than 19.5% greater than the number in 2001.⁶ In Marshall, Texas alone, where only 7 patent cases were filed in 2003, 116 patent cases have been filed in the last 16 months.⁷

Even more significant is the growth in the size and scope of these cases – the amounts of money at issue in infringement actions are much greater than ever before, and the typical case involves claims against numerous companies:

- prior to 1990 there had been only one patent damage award in history larger than \$100 million;⁸ over the next ten years (from 1990 through 1999) there were 13 judgments and settlements in that category, and in the next six years (between 2000 and 2005 there were 21, including one award for \$1.35 billion – the increasing number of gigantic cases is readily apparent;⁹
- the number of companies caught up in this litigation is large and growing: for example, the 218 infringement actions filed in Marshall, Texas, during the 28 months from January 2004 through April 2006 named 856 defendants, including more than 600 separate companies (some companies were named in more than one action).¹⁰

The perverse result is that the very laws intended to promote innovation actually are deterring innovation. The additional costs – in both legal fees and unjustified extortionate settlements – “create[] a substantial ‘innovation tax’ that afflicts some of America’s most important and creative firms” and, by extension, their customers.¹¹

⁴ *Id.*

⁵ William O. Kerr and Gauri Prakash-Canjels, *Patent Damages and Royalty Awards: The Convergence of Economics and Law*, in *les Nouvelles*, June, 2003, at 83.

⁶ Data compiled from Table C 2, U.S. District Courts - Civil Cases Commenced, By Basis of Jurisdiction and Nature of Suit During the Twelve Month Periods of Dec. 31 to Dec. 31 (2000-2001, 2001-2002, 2002-2003, 2003-2004, 2004-2005).

⁷ Chuck Lindell, “A Litigation Boom,” *Austin American-Statesman* (Apr. 16, 2006), at A10; PACER System for the United States District Court of the Eastern District of Texas. (identifying eight cases filed between April 13 and April 30).

⁸ William O. Kerr and Gauri Prakash-Canjels, *supra*;

⁹ Internet Patent News Service & Source Translation and Optimization Co., Table of Patent/copyright infringement lawsuits/licensing awards, at <http://www.iplaw-quality.com/economic/awards.htm>

¹⁰ PACER System for the United States District Court of the Eastern District of Texas (statistics based on a review of complaints filed between January 1, 2004 and April 30, 2006).

¹¹ Adam B. Jaffe & Josh Lerner, *INNOVATION AND ITS DISCONTENTS* 16 (2004).

As a result, a company creating a new product must consider whether that product will be sufficiently profitable to cover not only development and production costs, but also potential settlement payments on unjustified infringement claims. The risk of infringement lawsuits will cause some firms "to avoid the mine field altogether, that is, refrain from introducing certain products for fear of holdup."¹² That deters innovation and thereby inflicts significant damage upon our entire economy.

Relatively recent changes in patent litigation rules have transformed the system from a fair forum for resolving disputes into a source of settlement leverage for plaintiffs, enabling them to force large payments without regard to the merits of the underlying patent claims. The litigation system needs serious reform to allow the free market to operate without the influence of litigation-driven leverage. That is why Cisco and a number of other technology, manufacturing, media and financial services companies have joined together in the Coalition for Patent Fairness, which seeks to reform the patent litigation system.

In my testimony today I would like to address three issues: the importance of effective post-grant review procedures, the impact of the Supreme Court's decision last week in *eBay*, and the other litigation reforms necessary to restore balance in the patent litigation system.¹³

Post-Grant Administrative Review

The quality problems in the patent process are broadly recognized.¹⁴ It is simply impossible for an examiner – in the limited time available and without the benefit of an adversary presentation – to identify and analyze all relevant prior art and to ensure that any patent that is granted is properly limited. This is true with respect to any sector, but it is especially true with respect to patent applications in highly technical areas.¹⁵

¹² Carl Shapiro, *Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard Setting*, in 1 INNOVATION POLICY AND THE ECONOMY 119, 126 (Adam B. Jaffe et al. eds., 2000).

¹³ Providing additional resources to the PTO in order to improve the patent examination process also will help address these problems. Cisco supports ensuring adequate funding for the PTO by ending the practice of diverting patent fees, which will allow the agency to hire more examiners and provide better training. In addition, there should be a mechanism to allow members of the public to submit prior art and other information relevant to patentability, together with commentary on that art and information, so that the examiner's decision may be based upon the best possible prior art information. Finally, Cisco has submitted comments in support of the PTO's proposed changes to limit the filing of continuations, and we encourage the Congress to adopt reforms to end abuses of the continuation process as well.

¹⁴ These quality issues have been discussed by both the National Academy of Sciences and the Federal Trade Commission. See Nat'l Academies, Nat'l Research Council, A PATENT SYSTEM FOR THE 21ST CENTURY 37 (Stephen A. Merrill et al. eds., 2004); FTC, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY (2003). Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 Northwestern Univ. L. Rev. 1495 (2001), at 1500 ("It is not surprising, therefore, that the PTO issues many patents that would have been rejected had the examiner possessed [technical] knowledge.").

¹⁵ An additional problem in the software field is the fact that prior art (which is the totality of previously known technologies against which a new invention is measured to ensure that it merits a patent) is not as well documented for the computing field as it is in some other areas. In part this is because, for many years, patents were not readily available for software. It is also attributable to the nature of large-scale commercial software and computing – millions of lines of software code or billions of transistors or other components that may require significant effort to identify or understand. This makes the task of the patent examiner difficult: she must determine the patentability of software inventions without always having a complete understanding of what is already known in the art.

The primary means of challenging the validity of a patent is through litigation. (Although current law provides for an *inter partes* administrative reexamination process, that procedure is so restricted that it has little or no practical utility, and that is why fewer than 100 requests for *inter partes* reexamination have been ever been filed.¹⁶) Not only is litigation an extremely costly approach, but patent litigation rules assign a presumption of validity to any patent issued by the PTO and the decision maker in a judicial proceeding will likely be a jury that has no technical knowledge and will be influenced substantially by the existence of a government-issued patent. One study found that juries upheld the patent's validity in 71% of the cases (as compared to 64% for bench trials).¹⁷ In some jurisdictions, the rate is 90%.¹⁸ The presumption of validity thus makes the judicial process an extremely poor vehicle for correcting the issuance of patents that do not meet patentability tests.

The obvious solution to this problem is to allow effective post-grant administrative proceedings to challenge the issuance of a patent, presided over by administrative judges trained not to view the patent applicant as the agency's "client" and the agency's mandate as "issuing patents", which is the PTO's current posture, but to assess fairly whether validity objections have merit. That would place the decision-making responsibility where it belongs – with the expert agency. It would enable the agency to allocate resources to more intensive examination of patents that are a source of controversy. And it would give the agency the benefit of adversary proceedings to sharpen the issues and to provide the agency with all relevant arguments (and supporting background materials) for and against the validity of the patent.

At the same time, as the holder of over 2,500 patents, we recognize that the post-grant review process cannot unfairly burden the patent holder with dilatory, duplicative and expensive proceedings. The principle that justice delayed is justice denied applies with full force to the patent process. Our comments today take this important interest into account.

Before presenting our suggestions, a bit of background regarding the nature of the problem will be illuminating. Although it would be useful to allow an aggrieved party to seek post-grant review immediately after the issuance of a patent, a so-called "first window," that alone will not solve the quality problem. Rather, the inclusion of a "second window" triggered by receipt of a notice of infringement or patent infringement complaint is also necessary. Let me explain why with reference to the experience of technology companies like Cisco.

Technology products typically are made up of dozens – or even hundreds or thousands – of components against which a patent holder could attempt to assert a claim. Thus, computers, cellular telephones, MP3 players, as well as airplanes, cars and communications networks often contain thousands of different physical components, as well many different means of operation,

A similar problem exists with respect to business method patents. Indeed, Justice Kennedy in the *eBay* case noted "[t]he potential vagueness and suspect validity of some of these patents." Slip op. 2 (concurring opinion).

¹⁶ David Cochran, *Toward a Post-Grant Opposition Proceeding in the United States*, Mondaq Business Briefing, Apr. 21, 2006 ("[A]s of June 2005, only about 80 *inter partes* requests had been filed.").

¹⁷ Kimberly A. Moore, *Judges, Juries, and Patent Cases — An Empirical Peek Inside the Black Box*, 99 Mich. L. Rev. 365, 388 (2000).

¹⁸ Chuck Lindell, "A Litigation Boom," *Austin American-Statesman* (Apr. 16, 2006), at A10.

each of which may draw the interest of patent holders. A single computer program may contain hundreds or thousands of components or elements; a computer chip may have millions of parts.¹⁹

A technology company therefore cannot know at the time a patent is issued (the time of the “first window”) whether that patent might become relevant to the company’s business sometime in the future. Indeed, even when a technology business is developing a new device or a new computer program, it often is extraordinarily difficult – notwithstanding the business’s best efforts – to identify all of the existing patents, let alone pending patent applications, that may be relevant to each of the hundreds or even thousands of components that make up that new product.²⁰

This problem is compounded by the fact that patent holders’ subsequent infringement claims often bear little relation to the invention described in the patent and therefore cannot be anticipated by the potential defendant. For example, one patent holder claimed that the Internet service provider was infringing its patent by providing Internet access services to the ISP’s customers, where the patent described a system in which multiple users at remote terminals could access data stored centrally when in reality the ISP only provided its customers with the ability to access the Internet.²¹ Our own litigation experience indicates that there simply is no way to anticipate the far-fetched arguments that some patent holders will advance in attempting to stretch the coverage of their patents. By the time a defendant is even made aware that a patent holder will attempt to make an infringement claim, a first window will be useless.

The “entire market value rule,” which can result in an award of patent damages based on the entire sales price of a product no matter how limited the nature of the feature which is claimed to infringe (an issue discussed in greater detail below), provides patent holders with a strong incentive to bring such claims in an attempt to capture that windfall. Even when the subject matter of the patents, if infringement were to be found, would cover an obscure aspect of a product, with no apparent economic value, damages assessed on a very large revenue base could result.

For these reasons, limiting post-grant review to the period immediately after the grant of the patent will doom the post-grant process to irrelevancy. It is essential that a “second window” for post-grant review be triggered by the receipt of a notice of infringement or of a patent infringement complaint.

To avoid unjustified burdens on the patent holder, we therefore suggest that the “second window” be circumscribed with reasonable limitations to eliminate any potential unfairness:

- if the prospective defendant chooses to initiate a post-grant review process, he or she will be estopped from re-litigating in the court action any issues **actually** raised and decided in the administrative proceeding and subsequent action for judicial review, so long as the

¹⁹ Nat’l Academies, Nat’l Research Council, A PATENT SYSTEM FOR THE 21ST CENTURY 37 (Stephen A. Merrill et al. eds., 2004).

²⁰ FTC Report, Ch. 2, at 28.

²¹ The claim was rejected in *British Telecommunications PLC v. Prodigy Communications Corp.*, 217 F. Supp.2d 399 (S.D.N.Y. 2002).

post-grant review process allows for discovery and argument analogous to that available in court;

- if the prospective defendant chooses not to initiate an administrative proceeding, then any challenge to the validity of the patent in the court action must overcome the presumption of validity;
- a patent holder may choose not to allow initiation of a “second window” administrative proceeding, but in that case the presumption of the patent’s validity would not apply in any subsequent infringement action (for small inventors, we suggest that the PTO establish an office to defend the validity of patents whose owners lack the resources to do so).

Such a procedure would provide defendants with an incentive to challenge the validity of a patent before the expert administrative agency – the decision maker that, because of its technical expertise, is most likely to render a correct decision when fully informed of the relevant facts. It also will avoid the bizarre situation in which the PTO announces tentative determinations that particular patents are invalid at the same time a court is awarding damages and considering injunctive relief on the basis of its findings of validity and infringement of the very same patents. And there is no risk of duplicative litigation, because any issue actually raised and decided in the administrative proceeding cannot be relitigated in court. Strict time limits and penalties for delay should be included to ensure that the administrative proceeding is not used to thwart legitimate infringement claims.

The current *inter partes* review procedure has failed because estoppel was applied not just to claims actually raised in the proceeding, but also to those invalidity grounds that could have been raised. It is essential that any second window not repeat this mistake. We believe the checks and balances described above will allow for fair review, without an overly broad *res judicata* effect and without imposing undue burdens on either the patent holder or the party accused of infringement.

The Impact of the eBay Decision

As the Subcommittee knows from its prior hearings on this subject, one aspect of the litigation system that enabled abusive litigation was the Federal Circuit’s standard for granting injunctions in infringement actions. Ignoring the plain language of the governing statute, that court had adopted a “general rule that courts will issue permanent injunctions against patent infringement absent exceptional circumstances.”²²

The Supreme Court last week unanimously overturned that standard, holding that district courts in infringement actions must apply the traditional four-factor test for granting an injunction. The Court emphasized that “[t]he decision to grant or deny permanent injunctive relief is an act of equitable discretion by the district court, reviewable on appeal for abuse of discretion.”²³ Most importantly, the Court recognized that the system is subject to abuse by a

²² See, e.g., *MercExchange LLC v. eBay Inc.*, 401 F.3d 1323, 1339 (Fed. Cir. 2005).

²³ *eBay Inc. v. MercExchange LLC*, No. 05-130 (May 15, 2006), slip op. 2.

new class of plaintiffs and sought to correct the balance on the only issue before it: the standard for issuing injunctions.

The Court held that this conclusion followed from the language of the Patent Act, which “expressly provides that injunctions ‘may’ issue ‘in accordance with the principles of equity.’”²⁴ It also stated that “‘a major departure from the long tradition of equity practice should not be lightly implied’” and “[n]othing in the Patent Act indicates that Congress intended such a departure.”²⁵

The Federal Circuit had justified its rule requiring injunctions on the theory that a patent conferred a right to exclude that could only be vindicated through an injunction. The Supreme Court rejected this conclusion, pointing out that “the creation of a right is distinct from the provision of remedies for violations of that right.”²⁶ The statutory recognition that a patent should have the attributes of personal property – not real property – is “[s]ubject to the provisions of this title,” 35 U.S.C. § 261, including, presumably, the provision that injunctive relief ‘may’ issue only ‘in accordance with the principles of equity.’”²⁷

The Supreme Court also provided some guidance on how lower courts should apply its decision. It not only rejected the Federal Circuit’s “general rule” that an injunction is virtually always appropriate; it also rejected the district court’s “categorical[]” rule that a patent holder’s “lack of commercial activity in practicing the patents” and “willingness to license its patents” sufficed to demonstrate that the patent holder would not suffer irreparable harm in the absence of an injunction.²⁸ The Supreme Court stated that “some patent holders, such as university researchers or self-made inventors, might reasonably prefer to license their patents, rather than undertake efforts to secure the financing necessary to bring their works to market themselves. Such patent holders may be able to satisfy the traditional four-factor test and we see no basis for categorically denying them the opportunity to do so.”²⁹ Thus, the Court squarely rejected all broad categorical rules in favor of a fact-specific inquiry that takes account of the facts of each particular case.

Additional guidance on applying the four-factor test is provided by the two concurring opinions. Chief Justice Roberts, joined by Justices Scalia and Ginsburg, pointed out that “[f]rom at least the early 19th century, courts have granted injunctive relief upon a finding of infringement in the vast majority of patent cases” and concluded that in applying the four-factor test, “‘a page of history is worth a volume of logic.’”³⁰ Justice Kennedy, joined by Justices Stevens, Souter, and Breyer, agreed that this history is relevant, but pointed out that

[t]o the extent earlier cases establish a pattern of granting an injunction against patent infringers almost as a matter of course, this pattern simply illustrates the result of the four-factor test in the contexts then prevalent. *The lesson of the historical practice,*

²⁴ *Id.* at 3 (quoting 35 U.S.C. § 283).

²⁵ *Id.* at 3 (citation omitted).

²⁶ *Id.* at 3.

²⁷ *Id.* at 3 (citation omitted).

²⁸ *Id.* at 5, 4.

²⁹ *Id.* at 4.

³⁰ *Id.* at 1, 2 (Roberts, C.J., concurring, joined by Scalia and Ginsburg, J.J.)

*therefore, is most helpful and instructive when the circumstances of a case bear substantial parallels to the litigation the courts have confronted before.*³¹

Justice Kennedy went on to observe – as discussed earlier in my testimony – that “[a]n industry has developed in which firms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees. For these firms, an injunction, and the potentially serious sanctions arising from its violation, can be employed as a bargaining tool to charge exorbitant fees to companies that seek to buy licenses to practice the patent.”³² District courts’ equitable discretion allows them “to adapt to the rapid technological and legal developments in the patent system” and to “determine whether past practice fits the circumstances of the cases before them.”³³

Both groups of Justices agree that when the facts and circumstances of a case resemble those of traditional patent infringement cases addressed by courts for more than a century, an injunction is likely to issue. When “the nature of the patent being enforced and the economic function of the patent holder present considerations quite unlike earlier cases,”³⁴ Justice Kennedy emphasized that courts must scrutinize the facts closely to determine whether the four-factor test is satisfied, and Chief Justice Roberts did not disagree.

For example, when a university or a small inventor grants a meaningful exclusive license to a third party that has the financial resources and business experience to practice the invention, that exclusive license is a traditional approach to practicing a patent designed to transfer to the licensee the benefits that would accrue to a patentee that practices its invention. Infringement interferes with those benefits in the same way it would if the patentee were the one exclusively practicing the invention.

The situation is quite different, however, when a patent holder is willing to issue licenses broadly to a number of participants in the market. Infringement still injures the patent holder in the economic sense because it deprives the patent holder of licensing revenues. But the patent holder’s willingness to accept license payments in return for multiple nonexclusive licenses – an unusual arrangement, as Justice Kennedy observed – provides strong evidence that money damages are likely provide adequate compensation for that injury.

Although the Supreme Court has provided excellent guidance for the lower courts, the real-world impact of the decision on the patent litigation system will become clear only when the district courts – freed of the Federal Circuit’s virtual *per se* rule requiring injunctions – begin to apply the four-factor test and those decisions are reviewed by the court of appeals. We believe that Congress should allow this process to go forward.

As positive as the *eBay* decision may be, however, the Court’s ruling will not solve all of the problems of the patent litigation system. As the *Wall Street Journal* stated last week, “taking away the threat of a crippling automatic injunction in unwarranted cases” is “progress,” but

³¹ *Id.* at 1 (Kennedy, J., concurring).

³² *Id.* at 2 (Kennedy, J., concurring).

³³ *Id.*

³⁴ *Id.*

“isn’t going to fix all that ails our patent system.”³⁵ The *Los Angeles Times* agreed: “Now that the Supreme Court has started fixing the patent morass, lawmakers need to finish the job.”³⁶ One patent attorney was even more to the point: “I don’t think patent holding companies will change their strategies. Patent litigation will be very lucrative even if injunctions can’t be obtained as readily.”³⁷

Indeed, the Supreme Court’s decision itself provides strong impetus for a number of key reforms. For example, the Court’s restoration of district courts’ equitable discretion makes it even more important to eliminate forum shopping that seeks to game the system by selecting a favorable forum notwithstanding the absence of any real connection to the litigants or matters in dispute. And four Justices recognized the unfairness of the situation in which remedies are applied without taking account of the fact that “the patented invention is but a small component of the product the [defendant] companies seek to produce.”³⁸

Given this pressing need for additional reform, I will turn next to the four specific areas in which we believe legislative action is essential in order to restore balance to the litigation system.

Other Necessary Litigation Reforms

1. Eliminate Forum Shopping

The phenomenon of forum shopping in patent litigation is well documented. One expert who has studied this phenomenon recently testified that “forum shopping is alive and well in patent cases in the district courts.”³⁹ The venue statute subjects virtually any company with national sales to suit on an infringement claim in any judicial district in the country. “Currently, patentees have the ability to sue in any of the 94 district courts – virtually unfettered ability.”⁴⁰

The “magnet jurisdiction” phenomenon – reflected in the sharp rise in cases filed in Marshall, Texas that I have already discussed – appears to be fueled in part by the perception that plaintiffs are more likely to prevail in that jurisdiction than in other courts.⁴¹ Some empirical evidence supports this conclusion.⁴²

³⁵ *Wall Street Journal*, May 16, 2006, at A14 (editorial).

³⁶ *Los Angeles Times*, May 17, 2006, at B12 (editorial).

³⁷ Erik E. Larson, “Muted Impact Seen From Supreme Court’s eBay Ruling,” *Portfolio Media*, (May 17, 2006).

³⁸ *eBay*, *supra*, at 2 (Kennedy, J., concurring).

³⁹ *Improving Federal Court Adjudication of Patent Cases: Hearings Before the Subcomm. on Courts, the Internet and Intellectual Property of the H. Comm. on the Judiciary*, 109th Cong., 109-59 (Oct. 6, 2005) (testimony of Kimberly A. Moore, Professor of Law, George Mason University School of Law), at 6.

⁴⁰ *Id.*

⁴¹ Alan Cohen, *From PI to IP: Texas Attorneys Transform Their Practices After Tort Overhaul*, 21 Tex. Law., No. 36, at 15 (Nov. 7, 2005); M. Craig Tyler, *Patent Pirates Search Texas for Treasure*, 20 Tex. Law., No. 29, at 40 (Sept. 20, 2004) (“Juries in East Texas . . . are much less likely to have a member with any technical training or education, which . . . makes East Texas federal courts an attractive venue for would-be plaintiffs, who know that the jury will, instead, gravitate toward softer or superficial issues that are difficult to predict.”).

⁴² “Since 1994, patent owners have prevailed in 88 percent of all jury trials and 75 percent of bench trials in Marshall” (Cohen, 21 Tex. Law., No. 36, at 16), figures that far exceed the national averages of 68% and 51% respectively found in Moore, *Judges, Juries, and Patent Cases — An Empirical Peek Inside the Black Box*, 99 Mich. L. Rev. 365, 386 (2000).

Lawsuits should be resolved by a forum that has a reasonable connection to the underlying claim, and venue standards should be drawn to preclude “gaming the system” through forum-shopping. This is especially true now that the Supreme Court has restored district courts’ discretion to determine the appropriateness of an injunction: plaintiffs should not be permitted to circumvent the Court’s decision by funneling cases into courts that are predisposed to granting injunctions, just as defendants should not be able to target courts predisposed in the opposite direction.

2. Revise the Standard For Calculating Royalties/Damages

When a small component of a multi-component system or product is alleged to infringe a patent, the plaintiff’s damages claim typically is based on a percentage of the value of the entire product, rather than on a percentage of the value of the infringing feature or functionality.⁴³ This approach greatly inflates the potential damages available to a plaintiff, and provides a tremendous incentive to file infringement actions with respect to any aspect of a complex product, no matter how insignificant the contribution of the allegedly-infringing component. The amount of money potentially at stake in the litigation as a result of this rule imposes huge settlement pressure on the defendant, regardless of the strength of the infringement claim.

Congress should make clear that both damages and reasonable royalties must be calculated on the basis of the proportionate share of the value of the product that is attributable to the patentee’s contribution, rather than on the cumulative value of the entire product.

3. Prevent Suits for Worldwide Damages in U.S. Courts

Section 271(f) was added to the patent law to prevent companies from avoiding an infringement claim by manufacturing components of an infringing product in the United States and exporting those parts for assembly abroad. The Federal Circuit has interpreted the provision to apply to copies of computer programs made outside the United States if the software is made from a “master disk” developed in the United States.⁴⁴ That means that software companies may be held liable in United States courts for alleged infringement occurring outside the United States. Because these companies remain subject to suit in other jurisdictions where sales occur, they may be forced to pay twice.

This rule strongly encourages software companies to move their research and development operations outside the United States because global damages are not available in U.S. courts for software developed abroad. Congress surely did not intend that result.

Moreover, the lower courts’ erroneous construction of Section 271(f) is another litigation system-supplied incentive for plaintiffs to press abusive infringement claims. A claim for global infringement damages based solely on a U.S. patent obviously exposes a defendant to much

⁴³ *The Patent System Today and Tomorrow: Hearings Before the Subcomm. on Intellectual Property of the S. Comm. on the Judiciary*, 109th Cong., (Apr. 25, 2005) (testimony of Joel Poppen, Deputy General Counsel, Micron Technologies, Inc.) (“Damages are often vastly disproportional to the actual contribution of the supposed invention because damages are awarded based on the entire value of the product sold – even when the invention actually claimed in the patent is merely a small component of a larger, unpatented system.”).

⁴⁴ *AT&T v. Microsoft Corp.*, 414 F.3d 1366 (Fed. Cir. 2005), petition for cert. pending, No. 05-1056; see also *Union Carbide Chem. & Plastics Tech. Corp. v. Shell Oil Co.*, 425 F.3d 1366 (Fed. Cir. 2005).

greater liability than a claim limited to the United States; a plaintiff's ability to assert such a claim therefore increases its settlement leverage by threatening huge liability. This rule thus provides a defendant with a large incentive to settle regardless of the underlying merits of the infringement action.

Although this issue is now pending before the Supreme Court, and the Court has asked the Solicitor General to file a brief expressing the views of the United States with respect to the issue, we urge Congress to intervene to clarify its intent with respect to this provision and eliminate the harmful effects of this provision on the patent litigation system.

4. Reform the Standard for Willfulness

The patent law provides that a court may award treble damages and attorneys' fees if it finds that the defendant engaged in "willful" infringement.⁴⁵ Although the courts have characterized these extra-compensatory damages as a form of punitive damages, the standard applied to determine whether the defendant acted "willfully" is far lower than what is required to impose punitive damages in other contexts – proof of bad faith or egregious conduct is not required and a plaintiff may prevail simply by showing that "a potential infringer ha[d] actual notice of another's patent rights" and failed to satisfy his "affirmative duty to exercise due care to determine whether or not he is infringing."⁴⁶ This standard has the practical effect of shifting the burden of proof to the defendant whenever the plaintiff can show that the defendant had notice of the plaintiff's patent, even where the notice was received years after defendant completed development of its product.

The current willfulness standard has several negative effects. To avoid a finding of knowledge of the plaintiff's patent, too many companies now instruct their employees to avoid reading patents and patent applications. That is the precise opposite of the behavior that the system should seek to encourage.

If a company does learn of the existence of the plaintiff's patent, it may seek to satisfy its duty of care by obtaining an opinion of counsel that the patent is invalid, or the company is not infringing the patent, or both. But reliance on that opinion typically triggers a pre-trial disclosure obligation, which in turn may waive the attorney-client privilege more broadly – requiring disclosure of other materials prepared by the defendant's attorneys, even materials relating to the infringement litigation itself. The defendant therefore faces the choice of the loss of the privilege, and disclosure of otherwise-confidential material that the plaintiff may use to color unfairly the underlying infringement issue; or maintaining the privilege and sacrificing a key defense to the willfulness claim.

Given the very low burden on the plaintiff, the opportunity for treble damages, and the conundrum that a willfulness claim causes for defendants, it is not surprising that such claims are

⁴⁵ 35 U.S.C. §§ 284 & 285.

⁴⁶ *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana*, 383 F.3d 1337, 1343 (Fed. Cir. 2004) (Dyk, J., concurring in part and dissenting in part) (citation and internal quotation marks omitted).

asserted frequently in infringement litigation. One study found that they were asserted in more than *ninety percent* of all infringement claims.⁴⁷

In addition to the ill effects already discussed, these claims provide plaintiffs with increased leverage in the settlement/license fee negotiation process. The threat of treble damages based on an indefinite and fairly low standard mean that defendants face considerable pressure to settle even unjustified claims because a huge monetary judgment can result from a loss on the merits. Reform of both the willfulness standard and the procedure for litigating willfulness claims is essential to avoid these negative effects and provide a fair balance in the litigation process.

* * * * *

Opponents of reform likely will argue that the modest proposals we support to restore balance to patent litigation will deter innovation, severely disadvantage patent owners, and eliminate longstanding rights. That simply is not true. As we have discussed, the present rules are deterring innovation. Our goal is to restore fairness to a system that has been distorted by recent judicial decisions (in the case of Section 271(f) and the damages calculation issue), illegitimate exploitation of loopholes in the system (in the case of forum shopping and willfulness claims), and the decline in patent quality (post-grant reexamination).

Moreover, the same contentions were raised by many of the same opponents in arguing that district courts should not be permitted to exercise their equitable discretion in deciding whether to grant injunctions. There were claims that application of the traditional standard for injunctive relief was inconsistent with hundreds of years of precedent in patent cases, violative of property rights, inconsistent with U.S. treaty obligations, and unnecessary to ensure fairness in patent infringement litigation. The Supreme Court unanimously rejected all of those arguments and reaffirmed the district courts' discretion. Here as well, Congress should reject these unsupported arguments and act to restore fairness to patent litigation by adopting modest reforms.

Thank you.

⁴⁷ Kimberly A. Moore, *Empirical Statistics on Willful Patent Infringement*, 14 Fed. Cir. B. J. 227, 232 (2004).

**Written Statement of Jack Haken
Vice President
Intellectual Property & Standards
U.S. Philips Corporation**

On

**“Perspectives on Patents: Post-Grant
Review Procedures and Other Litigation Reforms”**

Before the

**Subcommittee on Intellectual Property,
Senate Committee on the Judiciary**

[Submitted in writing for the record]

Mr. Chairman and Mr. Ranking Minority Member, I'm Jack Haken, Vice President for Intellectual Property and Standards of U.S. Philips Corporation. I appreciate this opportunity to express our views on a topic of vital interest to Philips, namely preserving the current patent protection against infringing exports that is provided by Section 271(f) in Title 35 of the United States Code.

Philips is a manufacturer of electronic and electrical products and is one of the largest users of the patent systems in the United States and other industrialized countries. Last year we filed U.S. patent applications for about three thousand new inventions. Scientists and engineers at our U.S. laboratories have made pioneering advances that revolutionized and revitalized the electronics industry with innovations that led to high definition television, optical CD and DVD recording, digital cellular telephones, medical imaging and digital rights management. In 2004 Philips reported income from licensing our patented inventions that was well in excess of five hundred million dollars.

Section 271(f) is particularly important to our industry because it allows us to protect our intellectual property rights when American based companies export specialized components and parts kits for assembly in countries that do not have useful patent enforcement systems: in particular China, Taiwan, Korea and India.

As background, I would like to speak briefly about two major changes that have affected the electronics hardware industry during the past decade and that make Section 271(f) so important to us.

The first change is a well-recognized shift of high volume electronics manufacturing from the United States to overseas contract facilities. America is no longer a competitive site for manufacturing this equipment, but we remain a primary source of new ideas, technology and essential components that we export to the manufacturers. Royalties on exports of patented technology are a significant reason that our domestic research establishment remains vital.

The second change is, perhaps, not as visible as the first; in 1990 almost all consumer electronic devices were implemented in separate specialized sets as combinations of hardware circuit elements. For example, televisions, VCR's and telephone answering machines were produced and marketed in separate boxes and often via different selling channels. Today those same product functions are usually implemented in software and we are moving toward a small number of common multiuse hardware platforms. Software programs on personal computers and PDA's now provide audio and video recorder functionality. Cameras and music players are furnished as software features in cellular telephones and television players will soon follow. In this context, the boundary between hardware and software becomes fuzzy. Software and firmware code effectively reconfigures the hardware circuits to perform particular player or display functions that were formerly achieved in fixed circuitry.

The interchangeability of electronic hardware and software has also softened the boundaries between our traditional marketing and sales channels. Today we find that the traditional electronics manufacturers, major software houses and PC integrators are direct competitors for the same consumer electronics product space.

Section 271(f) was enacted by Congress to plug a 1972 judicially-created loophole that had allowed American companies to avoid liability for patent infringement by unassembled kits of parts or essential components of patented combinations that they exported for assembly overseas.

In March 2005 the United States Court of Appeals for the Federal Circuit confirmed that software code that Microsoft had exported to overseas manufacturers for incorporation onto the disk memories of computer systems was a "component" within the meaning of section 271(f). Judge Rader found that Microsoft's software "morphed" into hardware in the computer systems and that there was no indication of Congressional intent that the statute would distinguish between hardware and software or between tangible and intangible components. Judge Rader also found that any attempt to single-out software as exempt from Section 271(f) would run afoul of the United States' treaty obligations under the TRIPS Agreement. *Eolas Technologies and the Regents of the University of California v. Microsoft Corporation*, 339 F.3d 1325 (Fed. Cir. 2005).

Let me cite some examples of Philips' patent licensing programs that would have been negatively affected if Section 271(f) was not the law.

- 1) Optical Recording – Philips invented the technology that enabled development of the CD and DVD industries. We have patents in our portfolio that cover apparatus and methods that format and index data on these discs. When we started licensing these patents, the patented technology was implemented as hardware circuits in disc drives and recorder sets. Today the same technology is being implemented as PC software that is internationally marketed and distributed over the Internet and as firmware that is stored in semiconductor memory chips. We have great concern that any requirement that limited export patent protection would impact our ability to bring infringement actions against exporters who utilize the Internet to distribute original and upgrade software to manufacturers and users in developing countries where local intellectual property law enforcement is of little worth.
- 2) Speech and Image Coding - Philips invented important methods and apparatus for speech and image coding which we license to manufacturers of cellular telephone, digital cameras and set-top boxes. Large scale production of these products has quickly moved from the United States to other countries that have immature intellectual property enforcement systems like Taiwan, Mainland China and Korea, but American based companies are, and are likely to remain, the developers and providers of the application and operating system software that controls the hardware and implements the coding methods. The software is often exported to manufacturers either as source code, master object code copies or as firmware on semiconductor memory chips. Upgrade software is regularly distributed over the Internet and over cable television networks. Again we have great concern that any requirement that limited export patent protection would impact our ability to bring infringement actions against exporters who distribute this original and upgrade software.
- 3) Medical Imaging – Philips is one of the world's largest manufacturers of medical imaging equipment. Almost ten thousand of our United States employees work on medical products. Much of this equipment is computer-based; the processes that enable our CT,

MRI and ultrasound scanners and our patient monitoring systems are executed and controlled by software. New examination techniques and upgrades are distributed and installed using data formats which arguably are intangible and would arguably be excluded from export patent protection if Section 271(f) were amended or repealed.

- 4) Digital Personal Video Recorders (PVR's) – Philips marketed the first Tivo brand personal video recorders and the technology has already changed the television viewing habits of the American public. Philips' patented video compression technology enables these machines to pack recorded video signals onto hard disk drives. Today the same functionality and methods are implemented in PC software that is bundled with operating systems and distributed over the Internet.
- 5) Digital Rights Management – Philips holds a significant minority interest in InterTrust Technologies Corp. InterTrust owns and licenses a large portfolio of patents for digital rights management technology that enables the owners of copyrighted music, video works, books and other proprietary data to regulate and collect royalties when their properties are distributed on electronic media and/or over the Internet. In 2004 Philips reported a gain of over one hundred million dollars from the patent licensing activities of InterTrust. Components of many of these patented DRM systems are necessarily distributed at the same time and over the same media or channel with the creative materials that they manage and protect.
- 6) Travel Route Planning - Scientists at our Briarcliff Manor, New York laboratories invented and developed patented systems that are used to plan travel routes in car navigation systems and on Internet mapping web sites. The same methods have application to robotic movement and to managing escapes from disaster areas. Here again, we see infringing products and upgrades being distributed and exported on electronic media and over the Internet and again fear the loss of our enforcement rights if section 271(f) protection is reduced.

Some of the other witnesses may tell you that repeal of Section 271(f) is necessary to protect the U.S. software industry from foreign competition. The software industry could achieve cost savings today by moving its development and production facilities overseas, but it has chosen to remain in the United States and has flourished here, in no small part because the copyright, trade secret and judicial processes in the United States provide strong and effective protection for the intellectual property content of software products. There is no justification for letting them enjoy the benefit of a strong IP system in the United States for their own products while, at the same time, they would avoid exposure to other companies' patents when those same products are exported.

Thank you.

Prepared Statement of Philip S. Johnson,
Chief Patent Counsel,
Johnson & Johnson

Before the

Intellectual Property Subcommittee,
United States Senate
Committee on the Judiciary

On

“Perspectives on Patents: Post-Grant Review
Procedures and Other Litigation Reforms”

May 23, 2006

2 p.m.

Prepared Statement of Philip S. Johnson

Mr. Chairman and distinguished Members of the Subcommittee: I wish to thank you for the opportunity to testify on various aspects of patent law reform. Although I am active in a number of professional organizations with interests in patent law reform, I am appearing today only in my capacity as Chief Patent Counsel of Johnson & Johnson.

Introduction

By way of introduction, I am a registered patent attorney with 33 years of experience in all aspects of patent law. In addition to drafting and prosecuting patent applications, I have tried patent cases to both judges and juries, and have advised a wide variety of clients in many industries ranging from semi-conductor fabrication to biotechnology. Over the course of my career, I am pleased to have represented individual inventors, universities, start-ups, and companies of all sizes. In January of 2000, I left private practice to join Johnson & Johnson as its Chief Patent Counsel, which is the position I hold today.

Johnson & Johnson is a family of more than 200 companies, and is the largest broad-based manufacturer of health and personal care products in the world. Collectively, Johnson & Johnson companies represent this country's largest medical device business, its third largest biotechnology business, its fourth largest pharmaceutical business, and very substantial consumer, nutritional, and personal care businesses. Johnson & Johnson companies employ over 55,000 people within the United States. Johnson & Johnson's companies are research-based businesses that rely heavily on the U.S. patent system and its counterpart systems around the world. In 2006 alone, Johnson & Johnson's businesses invested \$6.3 billion in R&D.

As the manufacturer and marketer of thousands of products, the freedom to make and sell products in view of the patents of others is always a concern of Johnson & Johnson businesses. They therefore routinely review hundreds of patents during their product development processes, make appropriate design changes to avoid the patents of others and/or obtain appropriate licenses or legal opinions prior to launching their products. Nonetheless, Johnson & Johnson companies do from time to time become involved in patent litigation, finding themselves to be defendants about as often as they are plaintiffs. Most of these litigations involve competitors or would-be competitors, although some involve non-manufacturing patentees.

General Policy Considerations Driving Patent Reform

Patent law reform means different things to different people. For example, some proponents focus on enhancing the quality of patents issued by the U.S. Patent and Trademark Office. Other proponents have focused on litigation reform. The recent reports issued by the Federal Trade Commission ("FTC") and the National Academies'

Board on Science, Technology, and Economic Policy (“NAS”) surveyed the landscape and made many thoughtful recommendations.

While patents are a principal driver of innovation in many technologically-based industries, they are perhaps most important in the pharmaceutical and biotechnology industries. In industries in which it takes 8 to 10 years or more, and hundreds of millions of dollars, to develop, test and obtain approvals for a single product, patents are critical. No pharmaceutical company wants to commit this magnitude of investment to the development of a drug product only to later find that the patent was invalid or unenforceable due to an error in its examination, or because of previously undiscovered prior art.

The perceived predictability and reliability of patent protection weighs heavily on business planners in deciding whether to go forward with the investments needed to develop potentially promising new drugs. As a matter of sound public policy, we urge the Subcommittee to support changes that encourage investment decisions to be made based upon the potential importance of the new technology rather than on whether the patent examination process is or has been flawlessly conducted. As Chief Judge Sue Robinson of Delaware recently noted in her speech to the Association of Corporate Patent Counsel, patent litigation has become more a matter of semantics than of science. In Johnson & Johnson’s view, this trend is taking patent law in the wrong direction. Instead, we believe that the rewards promised by the patent system should closely track the value of the invention’s contribution to society, not the skills of those who happen to have been involved in drafting, prosecuting or examining the patent application. Just as plainly invalid patents (i.e., those purporting to cover that which contribute nothing to society) are a drag on the patent system, so too are rules that elevate the consequences of harmless administrative error to the point of depriving a worthy inventor of the protections to which he or she is otherwise entitled.

Policy changes that are perceived to lessen the economic value of patents, or their certainty of enforcement, have an immediate impact on investment decisions, and a long-term impact on the quality of innovation itself. While some might be tempted to encourage infringement, or to lessen its financial consequences, in the name of short-term competition, any such savings are likely to be heavily outweighed by the cost to society of foregoing future innovation that would lower costs and improve quality of life.

Johnson & Johnson’s interest in patent law reform is to insure that the patent system fairly rewards those who contribute to our society through the invention and development of new and useful products and processes. A fair, efficient and reliable patent system will continue to stimulate the investment in innovation that is necessary in today’s technologically complex world to create the new products and processes that will lead to better lives for Americans and the rest of the world. In addition, the best promise for preserving and enhancing our place in an increasingly competitive global marketplace will be to stimulate U.S. investment in research-based industries.

Prompted in part by the recent studies by the FTC and NAS, attention has recently been focused on ways to improve our patent system. For the past two years, Congress appropriately provided increased funding to the U.S. Patent & Trademark Office in support of its 21st Century Strategic Plan to improve both patent quality and patent pendency. This was an excellent first step towards upgrading our patent system, and one that, if continued, should bear fruit in the years to come.

21st Century Coalition for Patent Reform

Johnson & Johnson is a member of the “21st Century Coalition for Patent Reform,” a group of interested companies from a wide variety of industries that have worked together to develop consensus patent reform language. Thus far, some 39 major companies and organizations have announced their support for a “Coalition Text.” An electronic copy of the Coalition Text is attached, as is cited to hereinafter as “CT.” Included among these are supporters of this text are the American Intellectual Property Law Association (“AIPLA”) and the Intellectual Property Owners Association (“IPO”).

The Coalition Text should be viewed as a “package.” Unlike other packages, however, this package evolved through changes designed to garner the support of as many diverse stakeholders as possible. Thus, as in any legislation involving compromise, there may be some changes that are included in the spirit of creating a consensus regarding at least some of the goals of patent law reform. In supporting the Coalition Text, many companies have accepted significant compromises in the expectation that this text would garner support from companies in other industrial sectors, such as IT and software companies that have most recently shown interest in provisions relating to transfer of venue and to “damages apportionment.”

Companies that support the Coalition Text, as Johnson & Johnson does, generally view this compromise as a balanced and achievable approach to patent reform. This coalition package would provide significant advantages for owners of valid patents, while providing an opposition procedure that will provide a meaningful check on the quality of recently-issued patents. Subjective and intent-based invalidity issues would be largely removed from patent litigation, while ensuring that, like today, knowledge that is publicly accessible may still be used to assert that a patented invention is obvious.

Existing Posture of Pre- and Post-Grant Examination Procedures

One impetus for patent reform is the perception that the United States Patent and Trademark Office (USPTO) is neither conducting its examinations expeditiously, nor exercising a sufficient level of quality control over those examinations. Fortunately, the root cause of this problem, chronic under funding, has been alleviated at least for the moment by legislation providing funding sufficient to support the USPTO’s 21st Century Strategic Plan and the action by Congress to appropriate all of the fee revenue to the Office. Unfortunately, it will take several years of continued full funding for the USPTO for this plan to result in improvements in both patent quality and pendency. In the meantime, Congress should be cautious not to enact reforms that will place undue

demands on USPTO, or that are only responsive to the USPTO's current, transient problems.

Because no patent office, including ours, can ever find and consider every prior art patent or publication that might be relevant to a patent's validity, two post-grant procedures have been established to allow the USPTO to consider subsequently located patents and publications: *ex parte* reexamination and *inter partes* reexamination. These reexamination procedures are available to the public and are relatively inexpensive as compared to litigation. Because these are limited proceedings intended only to evaluate the impact of these documents on a patent's validity, discovery is not permitted and other validity issues, such as enablement, written description, best mode, claim indefiniteness, prior sale, prior public use and prior invention may not be challenged.

Single (9 Month) Window Post-Grant Opposition Proposal

In conjunction with other patent reforms, it has recently been suggested to allow third parties to more broadly challenge the validity of an issued patent before the USPTO. The Coalition Text contains a package of changes that would permit third parties to submit relevant prior art to the USPTO during the initial *ex parte* examination process (CT Sec. 8), and to institute an *inter partes* opposition within nine months of the grant of a patent (CT Sec. 7(f)). Unlike reexamination, in an *inter partes* opposition, essentially all validity issues may be raised (CT § 324). Unlike a federal court proceeding, where the challenger must prove invalidity by clear and convincing evidence, in the proposed *inter partes* opposition, a challenger need only prevail by a preponderance of the evidence (CT § 332(a)).¹ Moreover, unlike *inter partes* reexamination, collateral estoppel will be limited only to those issues of fact or law "actually decided by the panel and necessary to the determination of the issue." CT, § 336 (a)(1).

Several important intellectual property stakeholders nonetheless oppose establishment of any post-grant opposition procedure, including "first window" oppositions. Individual inventors, universities, small businesses and start-ups (especially biotechnology start-ups) are particularly concerned about adding the burden of an additional proceeding to the existing *ex parte* examination. These stakeholders believe that the lowered standard of proof that would apply to these proceedings is unfair to patentees who have convinced an impartial government agency of their right to a patent, and that the weakened collateral estoppel provisions that would apply will prevent them from enjoying "quiet title" to their patents. Additional concern has been expressed, based on experience in similar European oppositions, that thousands of U.S. oppositions may be filed each year. If so, these could easily overwhelm the USPTO's already-stretched resources.

Because the term of a patent is fixed, lengthened uncertainty concerning the nature of the patent grant inherently diminishes its perceived value. Stakeholders whose business models depend on the issuance of patents to raise much needed capital, and to justify the continued investment that is necessary to bring modern, high technology inventions to the

¹ Although IPO has endorsed the Coalition Text, its Board has separately passed a resolution favoring the clear and convincing standard for any post-grant opposition proceeding.

marketplace, are therefore particularly vehement in their opposition to any post-grant opposition process. In some cases, they fear that the continued uncertainty created by additional years of post-grant oppositions will cause their new ventures to fail.

Others, including Johnson & Johnson, see single, 9-month-window oppositions as a procedure whose costs will be outweighed by resulting improvements in patent quality and enforceability. In increasingly complex technologies, such as pharmaceuticals, biotechnology and drug-device combinations, it can take many years and hundreds of millions of dollars to bring a single product to market. For these investments to be made, it is imperative that the patent covering the product to be developed be valid and reliably enforceable against anyone who might try to expropriate the invention at the expense of the innovator. The availability of an opposition procedure to serve as an initial quality control check is seen by these supporters as a price worth paying to ensure that they are investing in patents of high quality and reliable enforceability. Included within this calculus is the perception that the weakened collateral estoppel standard and the lowered burden of proof will induce third parties to actively participate in this limited extension of the patent examination process.

Subsequent (Life-Of-The-Patent) Post-Grant Opposition Proposal

H.R. 2795, introduced in the House last year, proposed to further create a second window for bringing oppositions. This second window, which would be available throughout a patent's life, would open once a charge of infringement was received from the patent holder. The concept of the second window was that accused infringers could opt to institute a second window opposition instead of challenging validity in court.

Outside of the software/semiconductor industries, the idea of "second window" post-grant oppositions was immediately opposed as unfairly burdensome to patentees, as counterproductive, as undermining the reliability of the patent grant, as unfairly providing a "second bite at the apple" to accused infringers, as unnecessarily adding to the time and expense of patent enforcement, and as beyond the currently foreseeable capability of the USPTO. The opposition to this concept came not only from those who opposed first window oppositions, but from a far broader spectrum of intellectual property (IP) stakeholders, including the AIPLA, IPO, ABA-IPL, PhRMA, BIO, and many others, including Johnson & Johnson. In any event, in the "Amendment in the Nature of a Substitute to H.R. 2795" offered by House IP Subcommittee Chairman Smith, the proposal for a second window for oppositions was dropped.

A life-of-the-patent period for bringing oppositions would also undermine the benefits otherwise achievable from a single window post-grant review. The public interest strongly favors a patent system that issues high quality, reliably enforceable patents. Were it possible to bring an opposition throughout the life of a patent, competitors knowing of invalidating art or some other validity defect would have no incentive to bring an opposition during the initial period for doing so. The result would be to unnecessarily prolong the economic impact of a defective patent, while reducing the perceived incentives for patentees to invest in developing their inventions for market.

Finally, in the absence of any demonstrated capability that the USPTO can effectively implement a single window opposition procedure, to add second window oppositions would, at best, seem premature.

It must be noted, however, that would-be competitors are not without recourse should they conclude years after a patent is granted that it is invalid in view of the teachings of prior art references not previously considered by the USPTO. Both *ex parte* and *inter partes* reexamination procedures will continue to exist to allow members of the public to conveniently and expeditiously challenge a patent's validity.

Inequitable Conduct Reform

Numerous patent litigation reforms have been suggested in connection with the debate over patent reform. Chief among them is the need for inequitable conduct reform. A judicial creation dating back to at least the 1960's, when neither *ex parte* nor *inter partes* reexaminations were available, the doctrine was developed in response to a few egregious cases where patent applicants either intentionally withheld highly material prior art from the patent examiner, or lied to the examiner in order to gain allowance of their patents. Where the prior art was intentionally withheld, the courts saw themselves (and the public) as having been deprived of the expertise and opinion of the USPTO on issues material to patentability. Where affirmative misrepresentations were made, the applicant was seen as taking advantage of the *ex parte* nature of the proceedings, as the patent examiner is not otherwise active in the field, and lacks the resources needed to investigate, test and rebut an applicant's factual contentions. Thus, when it was shown by clear and convincing evidence that the information that was withheld or misrepresented was material to the examination and that the applicant had the specific intent to deceive the USPTO, the courts responded by holding the patent unenforceable.

In the ensuing four decades, the doctrine of inequitable conduct has evolved to be the defense of last resort for infringers. It is now raised in almost every case, and is sometimes successful even when all of the patent's claims are otherwise adjudged to be valid, and/or even when it is agreed that the information presented to the USPTO was entirely accurate. Recently, for example, the Court of Appeals for the Federal Circuit affirmed summary judgment of inequitable conduct under what appears to be a new duty of candor, applying a might-have-been-asked-should-have-been-answered standard, for deciding what must be told to a patent examiner. In *Ferring B.V. v. Barr Labs., Inc.*, 437 F.3d 1181 (Fed. Cir. 2006), the patent at issue was found unenforceable due to the submission of the entirely truthful declarations of non-inventors requested by the patent examiner to corroborate the art-recognized dictionary definition of a commonly used claim term ("peroral," meaning through the mouth). Notwithstanding the truthfulness of the declarations, the patent was held to be unenforceable because the USPTO had not been told that some, but not all, of the non-inventor declarants were people who otherwise had consulting or other business relationships with the applicant's employer.

Because not all information pertaining to an invention and its related prior art can be (or should be) submitted to the USPTO, accused infringers now resort to taking issue with

virtually anything said to the Office during prosecution and/or the manner in which the patentee chose to say it. Inequitable conduct issues have become a scourge on the patent system, increasing and prolonging patent litigation, and confounding and chilling communications between patent applicants and the USPTO.

It is arguable that the establishment of opposition proceedings should obviate any further need for the inequitable conduct defense, as competitors are well situated to submit additional material prior art and rebut any incomplete or misleading arguments that may have been made during the *ex parte* phase of patent examination. Nonetheless, the Coalition Text preserves the defense of inequitable conduct, but proposes to impose two threshold limitations: (1) a pleading threshold requiring that at least one asserted claim of the patent be found invalid, and (2) an evidentiary threshold requiring that the challenger show that but for the patentee's conduct, the invalid patent claim would not have been allowed. (CT § 5). Both of these are widely seen to be necessary to restore rationality to the inequitable conduct defense, and to remove the chill that currently exists during patent examination. Coupled with 9-month post-grant oppositions, these reforms should facilitate more open dialog between the examiner and applicant, and should improve patent quality.

Damages Apportionment/Whole Market Value

To most IP stakeholders, including Johnson & Johnson, there is simply no need to reform the current approach that is taken by the courts in the award of damages. The fact that the courts "pretty much get it right" is evidenced by the fact that critics of patent damages law have produced few if any cases where the courts "got it wrong." The Coalition Text nonetheless proposes compromise language that is intended to codify *Georgia Pacific* damages factor #13 in response to what was understood to be the original goal sought by members of the software/semiconductor industry. Where lost profits are not involved, and a reasonable royalty is to be determined, the key remains to link the determination of that royalty to the economic contribution of the claimed invention to the adjudged infringing product or process. As long as there is a sufficient nexus between demand for the infringing product or process and the characteristics, attributes or advantages conferred by the claimed invention, it remains entirely appropriate to award damages calculated on a royalty base that includes the entire value of the infringing product or process, as opposed to a sub-part or component thereof.

Unfortunately, the damages proposal in the Coalition Text has yet to gain widespread acceptance in the so-called "tech" community. These stakeholders instead suggest parsing the claimed invention into its elements to look for the so-called "inventive contribution" and to award damages on that feature alone. Under this theory, elements found in the prior art, and contributions made by the infringer to the product, would be subtracted out of the invention for purposes of the damages analysis.

"Prior art subtraction" has met widespread opposition in the IP community, as unfairly diminishing the value of patent damages. At some level, all inventions are combinations of old elements. As Chief Judge Howard Markey of the Court of Appeals of the Federal

Circuit once observed, “virtually all inventions are ‘combinations,’ and . . . every invention is formed of ‘old’ elements’...Only God works from nothing. Man must work with old elements.” Howard T. Markey, “Why Not the Statute?,” 65 *P.Pat.Off.Soc’y* 331, 333-34 (1983). Accordingly, in almost every instance, rigorous application of a prior art subtraction will leave little or nothing on which to award damages. Moreover, some inventions result from the elimination of prior art elements or steps in a process. Once again, using the prior art subtraction approach, no damages would be awarded to these inventions, no matter how economically valuable they may have been shown to be.

Venue

The Coalition Text includes a provision for transfer of venue in patent infringement actions that have been brought in jurisdictions without a substantial connection to the case (CT § 9). This contrasts with previous suggestions that would limit available jurisdictions to those where the defendant is found. This difference is important. Although there are significant policy reasons for limiting unfettered “forum shopping,” there are also significant policy reasons not to restrict patent owners from bringing actions in jurisdictions, such as the parties’ home jurisdictions or elsewhere, where important evidence relating to the case may be located. The proposed transfer provision would have the benefit of preserving the patent owner’s initial choice of venue if rationally connected to the parties or evidence, while permitting alleged infringers to transfer cases to more appropriate jurisdictions if the case has been brought in a jurisdiction without substantial connection to the matter to be decided. This provision will likely reduce forum shopping, and enhance the perceived fairness of our system of patent enforcement. This provision, although not a complete remedy to forum shopping, has received widespread support, including support from the Business Software Alliance (BSA).

Awarding Attorneys Fees to the Prevailing Party

Although not contained in any tabled proposal, it has also been suggested that a loser pays system similar to the English rule might be appropriate for application in patent cases, as it is in certain other areas of IP, such as copyright. Adoption of an English-type system would allow inventors with meritorious, but lower value claims to assert them without fear that attorneys fees might consume any damages award. Such a system would also deter parties with frivolous or highly questionable claims from bringing them for fear of having to pay their opponent’s attorneys fees.

While most agree that a loser pays system would discourage frivolous litigation, questions remain as to whether such a system is politically achievable. In addition, concern has been expressed that provisos such as a “substantial defense” exception might undermine the value of such a rule.

Johnson & Johnson appreciates the invitation to provide our views to the Subcommittee on these and other patent reform proposals, and look forward to working with the Subcommittee on patent law reform and other matters.

**A COALITION FOR 21ST CENTURY PATENT LAW REFORM:
BALANCED INITIATIVES TO ADVANCE QUALITY AND PROVIDE LITIGATION REFORMS
SEPTEMBER 1, 2005**

Agreement exists today on the need for significant patent law reform. Following a rapid surge of activity on Capitol Hill, lack of agreement on a small number of important issues has frustrated legislative progress on such reforms. A coalition of major U.S. corporations has now lent support to a reform package that is closely aligned with Chairman Smith's July 26, 2005 Substitute Amendment to H.R. 2795. It encompasses a balanced and achievable set of reforms that will not harm the interests of patent owners and will advance the interests of the public. The H.R. 2795-inspired reform package offers the following improvements to the patent laws:

Promote Patent Quality Enhancements. *Simplify the administration of patent laws and allow new avenues for challenging patents of questionable merit by providing:*

- a first-inventor-to-file priority system to eliminate the subjective, discovery-laden issues that arise from the current first-to-invent system
- a grace period to preserve the ability to publish before filing and to protect inventors against self-collision with their own disclosures
- objective prior art rules requiring patent-defeating information to be publicly accessible, and preserving exemptions for common assignment and joint research
- deletion of the best mode disclosure requirement
- universal 18-month publication of applications to disclose all new technology
- a 9-month post-grant opposition window to augment the examination process
- pre-grant prior art submissions to ensure examiners have complete information
- an expanded *inter partes* reexamination procedure that applies to all patents

Provide Litigation Reforms. *Limit the threat of patent enforcement from being used to intimidate accused infringers by:*

- codifying common law requirements relating to apportionment of damages
- codifying the duty of candor and limiting the ability to plead unenforceability to cases of actual fraud attributable to the patent owner
- limiting the ability to seek treble damages for willful infringement to situations where, *inter alia*, the patent owner has provided specific notice of the infringement
- allowing transfer of venue when needed to prevent unbridled forum shopping in patent cases
- expanding the "prior user rights" defense to apply to all U.S. manufacturers of all inventions once they complete substantial preparation for and/or begin commercialization

This reform package would provide significant advantages for owners of valid patents. Sustaining the validity in court of a patent that results from the new patent quality measures should be more predictable and certain. Subjective and intent-based invalidity issues would be removed. Knowledge that is not publicly accessible could not be used to assert that a patented invention is merely obvious.

A balanced, achievable patent reform bill – with the quality enhancements and litigation reforms described above – has the support of a wide spectrum of U.S. industry. Its foundation rests on the thoughtful and carefully crafted recommendations made by the National Academy of Sciences and the Federal Trade Commission following their multi-year studies of the patent system.

We urge the Congress to move forward to enact these needed, fair, balanced, and broadly supported changes into law.

Statement of Senator Patrick Leahy
Ranking Member, Judiciary Subcommittee on Intellectual Property
"Perspectives on Patents:
Post-Grant Review Procedures and Other Litigation Reforms"
May 23, 2006

Senator Hatch and I have been grappling with the very complex issues in the patent litigation process for more than a year. We are grateful for the assistance we have received from our witnesses, and from many others in the audience and around the nation. Today, we are here to address a particularly knotty problem – the proper scope and form of review procedures after the Patent and Trademark Office has granted a patent.

The proper scope and form raises sets of questions, matters of patent law, matters of administrative adjudication, and matters of litigation strategies. I want to remind everyone of the bigger picture here. Our Constitution enshrined patent rights for a reason: "to promote the progress of science and useful arts." There is no mandate from the Founders that we embrace any particular approach to the patent litigation system, no requirement that we favor one side or another in a patent dispute, and no directive to ensure that any other policies – however laudable they may be – are advanced. We are charged with creating and maintaining a system that gives inventors "exclusive rights" in their inventions for "limited times" in order to "promote the progress of science and useful arts."

I believe that an effective post-grant review procedure can, and should, do just that. Invalid patents can be weeded out more efficiently and the PTO can correct its own errors. Infringement claims can be evaluated more effectively. And patent holders can be more confident in the rights secured to them.

Looking at the written testimony of our witnesses today, we should have a lively debate on this topic. In fairness, I will say that I favor a robust post-grant process, which would include a limited "second window," in the event that a patent holder sues for infringement. But there are a multitude of subsidiary issues to be addressed, even within that framework, and I look forward to the assistance of all of you in understanding and resolving those issues. I want to thank Senator Hatch for his willingness to work on this enormous project.

Testimony of

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"Perspectives on Patents: Post-Grant Review Procedures and Other Litigation Reforms" – A hearing before the Subcommittee on Intellectual Property, Committee on the Judiciary, United States Senate

23 May 2006

Mr. Chairman and members of the Subcommittee, my name is Nathan Myhrvold. I am very pleased to share to my views as a scientist and inventor on the patent system with the Subcommittee. My personal history is relevant to my remarks today, so permit me to introduce myself.

Background

As long as I can remember, I have been fascinated with science and technology. I pursued science in school, earning a bachelor's degree in mathematics, and master's degree in geophysics and space physics, both from UCLA. I continued exploring other disciplines, getting another master's degree in mathematical economics and a PhD in mathematical physics from Princeton University. I would have finished school much earlier if I had focused on one topic, but I never met a kind of science I didn't like. This obsession with schooling might have consumed half my life, but for the fact that I started early, entering college at 14, and completing my PhD by age 23.

After Princeton, I was hired by Cambridge University in England, working directly for Professor Stephen Hawking. My research area was quantum field theory in curved space-time, perhaps one of the most obscure and esoteric scientific disciplines. At that point in my life, I would have told you that I'd be an academic researcher. But life has a way of throwing us curve balls. I took a three month leave of absence from working with Hawking to go to the San Francisco Bay Area to help some friends from graduate school on a software project. Before I knew it, I was caught up in entrepreneurial fever.

The year was 1984, and the software industry was still tiny. I became the CEO of Dynamical Systems, a software start-up with less than a dozen full-time employees. After two years of struggling to keep our heads above water, we were acquired by Microsoft. I spent the next 14 years as a Microsoft employee, reporting directly to Bill Gates as Microsoft's first Chief Technology Officer. I could scarcely believe that I went from esoteric theories in physics to what would become the largest software company in the world.

At Microsoft, I championed the development of new technology. Microsoft had zero patents and just two patent applications at the time I joined the company. I advocated increases in R&D spending, and patent filing, greatly increasing each of these. In 1991, I convinced the Microsoft board of directors to create Microsoft Research, the first major industrial research lab to be started in more than a generation. Laboratories like Bell Laboratories, GE Research Labs, Xerox PARC, and IBM Research have made a tremendous contribution to America's pre-eminence in science and technology. Unfortunately, these institutions were founded 30 to 100 years ago, and there aren't many recent examples. Very few of the new giants of technology have bothered to invest in research or create similar research organizations. Microsoft Research now employs over 700 researchers in seven laboratories, and is ranked as one of the leading research institutions in the world.

Invention - The Next Software

I retired from Microsoft in 2000, and founded Intellectual Ventures, a company dedicated to investing in invention. We have two lines of business. In one, we provide both business expertise and financing to inventors. The inventors receive funding and, in return, get a share of the profits from what they create. This is similar to venture capitalists funding entrepreneurs - the difference is that we seek to create great, new inventions, rather than new companies. Some of our inventors are full-time employees (including yours truly). Others work with us part-time and have day jobs as professors, or in their own small companies.

We file over 300 patents per year in highly technical disciplines such as solid state physics, computing, and medical devices. This rate should make us roughly the 25th largest inventing organization in America.

Our other line of business invests in existing inventions, similar to the way that private equity funds will invest in businesses. Creative inventors often come up with ideas that they are ill-equipped to commercialize. That's true regardless of whether the inventor is in a big company, a university or works independently on his or her own. We take a risk on these investments, and work hard to make them successful - just as private equity firms do - the difference is that we invest in inventions rather than companies.

In both of our businesses we have the same goal - provide capital, expertise and incentive to the invention process. That stimulates more invention - just as the existence of venture capital in Silicon Valley stimulated new companies. Invention is the fundamental foundation of America's innovation based economy. We live in a world where clever new ideas can be more valuable than any physical commodity.

When I first entered the software industry in 1984, the very idea of basing a business on software was novel. At the time, there was only one publicly traded software company¹. Virtually all software programmers worked for hardware companies. Software was considered a radical and unproven thing as the foundation for a business model. I know that seems bizarre from our vantage point today, but it really was the case.

People were uncomfortable with the idea that you could base a business on an intangible piece of intellectual property like software. You could get a hardware guy to admit that software was important - but only in the context of a "real" product - which meant hardware. How could you make a business based just on software? It didn't make sense. It also threatened the hardware companies - they viewed software as a component or piece part, not something that should be center stage.

An additional reason they were skeptical was the fear that people wouldn't respect copyright. This was a very real concern, and in the early days of the software industry there was widespread theft of software. The software industry mounted a two-pronged campaign. First, it educated people that this was wrong; popularizing the notion that misappropriation of software was "piracy." The industry made the argument that piracy was bad and buying software was good because it would lead to more features and better software. Second, it mounted a very aggressive litigation program to go after people that violated software copyrights. It was a classic combination of the carrot and the stick.

Today, we know that software can be an incredibly good business - in fact, it is much better business when you separate it from hardware. Most people in this country now appreciate the value of software, and know that piracy is ultimately a bad idea. The gamble that I made in 1984 to get into software paid off for me, and for thousands of others like me who built an incredible industry that is a tremendous asset to this country.

When I tell people that my company is based on invention, I get almost exactly the same reaction that I got about the software business in 1984. They're willing to admit that invention is good, and patents can be valuable. But surely, they say, it only makes sense in the context of a company with a "real" product. It's

¹ Cullinet, a mainframe database company.

the same reaction hardware gave about software - invention is nice, but only as piece part, not on center stage.

Like the software case, I think that invention is actually a better business if you focus on it exclusively, rather than trying to do it in the context of a company with other goals. Most things in life can be done better if you focus and specialize on being very good at them, rather than treating them as a sideline. Invention has that attribute - the best inventors may not be the best businessmen, or the best product engineers.

Also like the software case, this vision is threatening to some people. The established order sees inventors as a piece of the value chain - but a very small piece. The idea of bringing inventors and their inventions to the forefront (and giving them a large piece of the action) is threatening. Companies that do not use patents in their own business model are suspicious of those that do.

In the long run, I believe that invention has the potential to become a huge industry in its own right. Invention has been around for a long time - just as software has been around for 30 years prior to the creation of a software industry. If I am right, it will be a tremendous asset to the US economy, and help keep us competitive as a nation.

Of course, I could be wrong about this. The only way to find out is to make a bold bet and try it out. That is what we are doing: betting that invention is the next software.

It's About Property and Culture

Like any other part of the free enterprise system, the patent system offers economic incentive by enabling and protecting private ownership. Simply put, the patent system enables inventions to be a part of capitalism.

The patent system is an enormously successful component of US competitiveness, and has played that role since the founding of the Republic. The system that encouraged and sustained great inventors like Thomas Edison, Alexander Graham Bell and the Wright brothers is a critical component of America's 21st Century goals to lead the world in computing, biotechnology, nanotechnology and dozens of other exciting fields.

Why then have we gathered here to talk about patent reform? And why are there such strong views on both sides of the issue?

It is a complex topic, but there are some simple principles that explain much of the patent reform debate. It's all about company culture and how companies use patents.

In some industries, patents are vital to the business model of the company - it is how they stay in business. This is true in industries like pharmaceuticals, biotechnology, medical devices and many others. In these industries the culture of patents is embedded deeply. While companies may argue (or even litigate) over a specific patent, they all respect the patent system because it is vital to them.

The "tech industry," by which I mean computer software and hardware, networking, ecommerce and semiconductors, has a very different cultural attitude toward patents. Simply put, for most tech companies, patents have never been important; they have not been a way to make money.

Instead, the path to riches in the tech world is to fiercely compete for dominant market share, making your products become a de-facto standard. The typical situation is that one or two companies own 90% or more of the market. This position of dominance - some would call it monopoly - is how big tech companies got big in the first place, and it is also why they remain some of the most profitable companies on earth.

There are interesting exceptions. Qualcomm in particular is a high tech company that deeply respects patents - because their business model is based on patents. This shouldn't be surprising - companies that are based on the value of a brand, are sensitive to brand issue. Companies that make money on patents are sensitive to patents. Software companies and media companies are highly sensitive to copyright law. Meanwhile, companies that never made a dime from patents generally do not respect them.

In the rough and tumble race to dominant market share, patents are, at best, a distraction. Most tech companies have made a deliberate decision to ignore the patent system. It works like this. The tech company will hire smart people and put them under huge pressure and lucrative incentives to create state of the art products. They send people to technical conferences, and encourage them to read scientific papers so they can learn the latest techniques. Yet, they do not allow them to read patents - not even patents by the same people whose research papers they use, or patents of the institution from which they hire employees. In most tech companies it is vehemently against company policy for engineers to read patents. This is based on a "see no evil, hear no evil" theory that it is better to feign ignorance than to find you're infringing. They do not check their products to see if they infringe anybody else's patents - a common practice in other industries, known as patent clearance. Nor do they have established programs to license outside patents on a proactive basis.

This R&D strategy is very effective because you don't spend any time worrying about other people's property rights. It inevitably leads to infringing many valid patents. It's the engineering equivalent of driving at high speed, with the

accelerator pedal mashed to the floor, but not looking to see if there are other cars around.

There are several variations of this approach. Very young firms, such as most of the "dot com" Internet companies, were too busy scrambling for dominance. So in their early years they did not even bother to file any patents. Even today, most Internet companies have tiny patent portfolios. Their strategy is simple - "get big fast," own the market and, if there is a patent problem, sort it out later.

Older and larger tech firms have large portfolios of their own patents, which they use in what's called "defensive" use. Here's how it works. If a company builds a big enough portfolio of its own patents, then if somebody comes after them, it can counter sue using its patents against the challenger. It's like the theory of mutually assured destruction in nuclear warfare strategy. Sometimes it leads to a formal agreement between the companies, called a cross-license agreement, which is analogous to a treaty between countries. In other cases, it results in a strategic stalemate - neither company takes action against the other because they don't know where the suits and countersuits will lead.

"Defensive" use may sound like a benign use of patents, but, in reality, it is just another way to play corporate hardball in the pursuit of making lots of money. While the use of the patents in a suit is purely defensive, the infringement that precedes it isn't. Defensive use is another way to say: if you have enough patents, then you can steal any other product company's ideas with impunity. If they push back, you can threaten them with your "defensive" portfolio. A company with a strong defensive portfolio has little to worry about in lawsuits from its competitors. Often such a company will tell its engineers not to worry about using other people's patents. Go ahead and infringe because our defensive portfolio will buy us a compromise with the property owner.

The problem for defensive use companies is that this approach only works against an adversary that has a product, because it's the other guy's product that you target with your defensive portfolio. If the patent holder is a university, independent inventor or other entity without a product, then this approach does not work.

These diverging interests are behind the great schism in patent reform. Companies that see patents as their life blood are largely on one side. I'm the first to admit that I'm in this camp, along with other small inventors.

Companies that make deliberate decisions to infringe - or at least to take huge infringement risks - are on the other side. That includes a set of large and powerful tech companies. They know that they infringe thousands of valid patents. They may not know exactly which patents they infringe - but they know they have a problem. This gives them a powerful motive to attack the patent

system, with a particular focus on the rights of small inventors who are immune to their defensive portfolios.

The situation is reminiscent of the battle to fence the American West in the 19th Century. Cattlemen wanted to drive their cattle across a frontier unfettered by fences; while farmers sought the sanctity of private property they could call their own.

The analogy is apt because the tech world was a lot like the Wild West when I started in 1984. New companies sprouted up to take advantage of technology trends. They built operating systems and databases and network routers - things that most people had never heard of. There was a pervasive Wild West mentality as brash teams of young men and women joined start ups hoping to strike it rich in what became a technological gold rush. They challenged the longstanding mainframe computer industry with the fervor of rebels fighting the "personal computer revolution." That Wild West attitude included roaming across the open range of ideas, with little thought to whose intellectual property they infringed.

At one point, things seemed to be calming down with the personal computer revolution, until a new gold strike was discovered. The Internet revolution promised even more impact, and even faster riches. So, once again, Silicon Valley was thrown headlong into a Wild West style gold rush.

It's long past the Wild West phase in the tech industry. Some of the brash young companies failed, but the survivors turned into multibillion dollar behemoths. The one-time revolutionaries are now the established giants. But they haven't lost the cultural heritage of their origin.

A culture of infringement was second nature during the heady Wild West gold rush days. Like the old cattlemen, they want to continue to drive their products across the property lines of people who play by the rules and disclose their inventions to the patent office.

This may seem like paranoid speculation on my part, but it is a history that witness and participated in. I used to be a senior executive for a large technology company and, in that role, discussed this strategy with many other firms in earlier rounds of patent reform in the late 1990s.

Patent Litigation in Perspective

It's hard to come to Capitol Hill and say "I'm one of the wealthiest companies on earth. I made a deliberate decision to risk infringing some valid patents held by honorable inventors, and now I don't want to pay them." So, that's not how they put it.

The first step is to exaggerate the size of the problem. Despite what you may have heard, there is no "crisis" or explosion in patent litigation. The number of new patent lawsuits filed actually declined between 2004 and 2005. If you look back over the last 20 years, the number of filings has grown, but so have all forms of lawsuits. Over the last 20 years, patent lawsuits have consistently been in last place among the three forms of intellectual property lawsuits - trademark, copyright and patent.

Patent litigation has also grown more slowly than the number of patents. As a result, the likelihood of a patent issued today being involved in litigation is smaller today than at any point since 1995.

Filing a lawsuit is just the start of a multi-year process. In the vast majority of cases - 96.2% in 2005 - the cases settle before reaching trial. Filing a patent suit is, as a practical matter, a tool that companies use in negotiating a settlement. In fact, 30.8% of suits that terminated in 2005 did so without the court taking any action whatsoever - merely the act of filing a lawsuit prompted settlement. In the end, just 3.8% of the suits that terminated in 2005 did so in court.

The number of lawsuits that actually reach trial is thus a very small number, and one which is relatively consistent over the years. In 1998, just 104 patent lawsuits went to trial in the United States. In 2004, it was 96 lawsuits, and, in 2005, it was 107. These numbers are hardly indicative of a crisis.

Some people may protest that there are still "too many" patent lawsuits. Which begs the question - what is the "right" number of lawsuits? If there were zero patent lawsuits then it would mean that the patent system probably had no value! Rights that are not worth squabbling over probably aren't worth much at all. I don't pretend to have a figure for the correct number of patent lawsuits - but neither do the people who say there are too many.

If the number of lawsuits is down, what about the amount of money being paid. Isn't that out of control?

Although there are some high profile settlements, they are rare. Even the largest companies are not stung very often. Meanwhile their revenues and profits are enormous also. How do the dollars tally up?

We did a study of four leading high tech companies (all of them active in patent reform), and looked at publicly available SEC reports to see what they spent in patent lawsuit settlements from 1993 through 2005. In total, these companies paid \$3.7 billion in patent settlements over that period. However, they also raked in an astounding \$1.4 trillion dollars in revenue. This puts the cost of patent lawsuits and settlements at just 0.26% of revenue. That's an average

over the companies, but it is fairly consistent. The company with the highest number of lawsuits was still only 0.51% of revenues. \$3.7 billion is a lot of money, and that's why these companies are complaining, but when you put it in perspective, paying between a quarter and a half a percent of revenue to patent holders is hardly a crisis.

The decision to risk infringement looks like it is working pretty well. All that revenue and just 0.26% in cost. The strategy of "catch me if you can" works well if you are rarely caught. The \$3.7 billion number is large enough to motivate complaining on Capitol Hill, but on a percentage basis the strategy is working just fine. The financial incentive to infringe is massive.

One could criticize these numbers by saying that there are many small settlements that are not reported to the SEC. In addition, there are legal costs involved. Nevertheless, the total number can't be too different. Sarbanes-Oxley and other accounting rules prohibit companies from underreporting losses like this unless they are truly "not material," both individually and in aggregate. If there are a lot of large secret patent losses out there -- either individually or in aggregate -- then they have been concealed from the SEC, and somebody should point them out.

It's impossible to talk about patent litigation without tripping over the colorful term "patent trolls." Part of the strategy of complaining about patents is to blame the "problem" on this sinister sounding group. The trouble is, nobody knows what a "troll" is. The definitions vary, and you can't seem to pin anybody down. For example, trolls are usually described as litigious. My company is sometimes called a "troll," yet we have never filed a patent lawsuit. If I'm a troll, I must be the dumbest and least effective one of all!

If the term "patent troll" has any meaning at all, it should be reserved for people who manipulate or abuse the intent of the patent system. However, the intent isn't to make the world safe for tech monopolies. The intent is to reward genuine inventors with the incentive of private property. It's perfectly proper for every inventor to want to come up with the next big thing and to be able to get a return on their investment of time and resources. That's what the system is supposed to be about: providing real incentives for disclosure of one's intellectual creations. There is no requirement to build a product, because the patent system protects inventions, not products.

There are some genuine cases where abuse of the system occurs, just as there are people who manipulate or abuse every other legal system. Real patent law abuse is not common, yet the patent reform propaganda machine makes it sound rampant, yet there is absolutely no proof of this.

Since true abusers are hard to find, the patent reform lobby has focused, instead, on patent holders that don't make products, as if that is a problem. Yet even

here, the numbers are exaggerated. Reviewing patent litigation data, we've found that about 2% of all patent lawsuits are due to companies that license patents rather than create products, and half of those suits are due to just one litigious company. It is important to note that the vast majority of patent holders who don't make products are perfectly honorable. Also, such patent holders have long been a part of America's engine of innovation.

So why is there so much talk about "trolls" if they are so uncommon? When confronted by a puzzle like this, a good bet is to follow the money. If you look at where the big tech companies pay patent lawsuits and settlements it turns out that the vast majority goes to perfectly upstanding companies and institutions. This includes universities, small companies that were genuine innovators, or companies like AT&T, Lucent, Digital Equipment, Wang, and Unisys. A common pattern is that a genuine innovator will fall on hard times and need cash. This might be a troubled start up, or a former industry giant, but either way they need the money. So they seek to get paid for inventions they own, which other companies have appropriated. This isn't an "attack of the trolls" - it's capitalism in action.

Here's the rub. Legitimate patent holders, like those that collect most of the money from big tech companies, would have their patent rights severely weakened by many of patent reform proposals. It's a clever bait-and-switch maneuver to blame the dastardly "trolls" as way to sneak in changes that hurt the legitimate patent holders.

The campaign to label patent reform as an issue with patent "trolls" is clever because it seeks to blame a set of bad guys, and make this seem like a sort of tort reform. The tort reform message resonates well in Congress, so it is a good way to frame the issue. But the reality is that the patent reform dispute is not about bad actors misusing the court system - it's about taking property rights away from inventors.

Indeed, almost all of the things that the "trolls" are accused of are also done by the same large tech companies doing the "troll" name calling. As one example, some people are upset that patents are bought and sold. Yet every other asset in capitalism is bought and sold - why should patents be any different? In the case of software companies, their whole life is about selling software - an intangible intellectual property asset. Yet many software companies are fiercely anti-patent and are quick to use the "troll" label. How could be it wrong to buy and sell patents, but OK to buy and sell copyrights? When Hollywood studios buy and sell portfolios of feature films, nobody seems to mind. What is so awful about patents changing hands?

Irrespective of the name calling, every major tech company behind patent reform buys patents. They also do the other things that trolls are accused of - they file

patent lawsuits on patents in areas where they don't have products, they extract payment using techniques as hard knuckled as anybody else.

One irony about the "troll" debate is that all the blame seems to land on one of the parties. It's like saying that the divorce rate is too high, and just blaming one of the spouses. As the old saying goes "it takes two to tango." The fact is that many of the large high tech companies have been convicted in court time and time again of patent infringement, or have paid huge settlements to avoid conviction in cases they know they'll lose. Abuses of the system by these convicted serial infringers are at least as big a source of litigation as the plaintiffs filing the suits.

These convicted serial infringers should be held responsible for their patent lawsuits. If a tech company infringes a patent and refuses to deal with the patent holder, so that he or she is forced to take legal action, who's to blame? Blaming the patent holder amounts to blaming the victim.

A typical example is a leading Silicon Valley tech company which between 1993 and 2005 has been involved in 41 patent disputes. In 26 cases, the dispute started when they were sued for infringement - just over 2 cases per year. The majority of these settled for results too small for them to record with the SEC, but, in four cases the company paid a multi-hundred million dollar settlement. Mostly this company wisely avoids trial by settling, but not always. The company has been convicted of infringement, and the conviction was upheld on appeal.

So, this company has been sued twice a year for infringement. It has been found guilty of infringement. About every three years, it has had to pay a gigantic settlement to get out of an infringement suit. I'd say it's pretty clear that these folks have an infringement problem - this company is a committed serial infringer.

This isn't at all surprising since it has openly stated that it does not check products for patent infringement. It does not they allow its engineers to read other people's patents. Instead, it is a big proponent of "defensive" use of patents, and believe that they defensive portfolio is the answer.

In addition, this company has initiated patent lawsuits as the plaintiff, suing other companies 13 times, or about once year, fully half as often as it has been sued. So besides being a serial infringer, the company is a highly litigious plaintiff!

Yet, the company is also very quick to label others as "trolls" and is one of the leading proponents of patent reform. Well, of course, the company is in favor of it! It's like asking convicted criminals to opine on shorter sentences.

This isn't an isolated instance - many of the large tech companies active in patent reform have similar records. If Congress is going to take up patent reform to

solve the "troll" problem, it is only fair that the serial infringer problem be considered as well.

The focus on trolls, like the illusion of a "crisis" in patent litigation, is a red herring that may distract Congress from the real task of patent reform. The issue shouldn't be about demonizing one group of patent holders. Instead, Congress should focus patent reform on creating a fair and balanced set of rules for all players.

Reexaminations & Post-Grant Review

This brings us to the important issue of post-grant review. I have no sympathy with invalid patents. The strength of the patent system is based on having strong and valid patents. If a mistake is made and a patent is granted that shouldn't have been, then the system should correct it with post-grant review.

In general, the patent office does a reasonably good job of reviewing patents. Most bad patents are stopped by the examiner in the patent office. Claims that there are tons of bad patents are completely unproven. No objective study has shown that there is a systematic problem with bad or invalid patents being issued.

Instead, critics of the patent office like to showcase a few silly patents - like a patent² granted on a peanut butter and jelly sandwich - to ridicule the system. It sounds like the height of folly - how could the USPTO grant such a thing? Once you dig into the fine print, the real story comes out. The patent isn't really on PB&J in a general sense - it is about a specific manufacturing process for a packaged food product. It wasn't created by a "troll" - the patent was owned by J. M. Smucker Co., a major food company that used the process covered in this patent in a very successful product called Uncrustables which generates annual sales of over \$60 million per year. Given these additional facts, it doesn't sound quite so silly.

The real story of the PB&J patent actually shows how well the current system works. Smucker sent a cease and desist letter to Albie's Foods, a small Michigan food service company. Albie's won a government contract for supplying PB&J sandwiches to an Oregon school lunch program, which brought them to Smucker's attention. Albie's filed an *ex parte* reexamination, which resulted in rejecting all claims of the patent. Smucker appealed to the US Court of Appeal for the Federal Circuit which upheld the rejection. So, far from showing that the patent system is broken, examples like this show the fundamental strength of the patent system and how well it works.

² Patent 6,004,596

If there were lots of bad patents, as some people claim, then it should be easy to substantiate it. As one example, we should find that the existing re-examination procedures would find these bad patents. Yet, this is not the case.³ Only about 10% of the reexaminations completely eliminate a patent. In another 26% the patent comes through unscathed with no changes. The balance at 64% has some claims rejected or modified. These results show that patents in reexamination get serious attention. The majority of reexamined patents wind up modified in some way. But only a small number are totally thrown out. And it is important to note that the PTO takes reexamination very seriously. About a year ago the PTO created a special unit to perform reexaminations.

Similarly, statistics of patent litigation do not bear out any systematic weakness in the patent system. The pre-trial settlement rate for patent lawsuits is about 96%, which is comparable to the rate for most other business litigation. The University of Houston Law School compiled statistics for patent litigation results from 2000 through 2005 and found that on issues of patent validity, the patent holder won at trial on validity issues 58% of the time, the accused infringer prevailed 42% of the time. If there were tons of bad patents then surely the trial results would be overwhelmingly against the patent holder. But this is not the case.

So where are all these bad patents? Evidently, they aren't in the reexamination proceedings, and they aren't in the courts either. There probably are some bad patents out there - no system is perfect - but, if so, they don't seem to be hurting us all that much. A weak or questionable patent is unlikely to be the basis for a lawsuit for the very reason that it is weak.

The reason we hear about problems with patent quality goes back to the same cultural issues behind patent reform. It is awkward to complain that you don't want to pay for valid high quality patents. It's equally awkward to explain why you never check if you infringe other people's patents. So the people in this position rationalize their misbehavior by arguing that there are "lots of bad patents out there." Where is the evidence?

One reason for the trial statistics are as good as they are is success of the two forms of reexamination procedures that are used today. *Ex parte* reexamination was instituted by Congress in 1980. It is the cheapest, simplest and most widely used way to challenge a US patent after it issues.

Ex parte reexamination can be instituted by anyone, and done so anonymously. It may also be initiated by the Director. It is cheap and simple - you submit the prior art, and a legal brief explaining why the provided art invalidates the patent. This simple and inexpensive procedure is relatively popular. There were 524 *ex parte* reexaminations filed⁴ in 2005 - which is a rate that is five times the number

³ United States Patent and Trademark Office, Ex Parte Reexamination Filing Data, December 31, 2005

⁴ http://www.uspto.gov/web/offices/com/annual/2005/060413a_table13a.html

of patent lawsuits that went to trial that year. *Ex parte* reexaminations handle more far more patents than the courts do, and are thus a highly successful form of post-grant review.

A key reason is that once the patent office accepts a reexamination request, it will proceed. The acceptance rate⁵ is 96%. Coincidentally, that is the same as the number of patent lawsuits that settle before trial. So, the big difference between reexamination and lawsuits is that 96% of reexaminations actually occur and the patent is judged, whereas it's just the opposite for lawsuits, 96% of which never wind up judging the patents. That's why *ex parte* reexamination winds up processing five times the annual caseload of the court system.

A primary criticism of *ex parte* reexamination is also one of its benefits - namely that it is a simple and cheap procedure. The party opposing the patent holder submits the prior art with a complete brief, but does not participate in further arguing the case. The opportunity to argue further greatly increases the cost to the challenger, but may allow them to make a better case. As we shall see, cost and simplicity are not the only factors in post grant review.

Inter partes reexaminations are a more recent creation, originating in the AIPA of 1999, in part to provide a means for the challenger to participate. The original act did not fully implement the system however - it was substantially modified⁶ in 2002 to fix flaws in the original statute. *Inter partes* reexaminations are effectively only three years old. In addition, *Inter partes* has a rather extreme limitation that they are only applicable⁷ to patent applications filed on or after November 29, 1999. Since the reexamination cannot occur until the patents issue, which takes on average 30 months, this means that the very first patents to issue would be in 2001. 2002 was the first full year when patents were available for *inter partes* challenge. The vast majority of all active patents are as yet unavailable for *inter partes*. Given these circumstances it is amazing that there are so many *inter partes* challenges. Clearly, then the number of patents even eligible for *inter partes* reexamination was very small at the beginning. How could the patent office have projected 400 per year?

The patent bar is conservative and it takes time to develop strategies for a new option like *inter partes* reexamination. Nevertheless, *inter partes* reexaminations have taken off. There were 21 filed in 2003, 27 in 2004 and most recently 59 filed⁸ in 2005. The rate of growth is very fast – indeed, if there is an "explosion" of anything involving patent litigation, it is the rapid growth of *inter partes* reexaminations, which more than doubled in the last year. The total number of *inter partes* reexaminations is still small compared to *ex parte*, but that is largely

⁵ http://www.uspto.gov/web/offices/dcom/olia/reports/reexam_report.htm

⁶ http://www.uspto.gov/web/offices/dcom/olia/reports/reexam_report.htm

⁷ 37 CFR 1.913

⁸ http://www.uspto.gov/web/offices/com/annual/2005/060413b_table13b.html

because *ex parte* reexamination has a 22 year head start, and thus applies to the entire base of patents - rather than just the last couple years worth.

The biggest challenge for the growth of *inter partes* reexamination is that it competes with both *ex parte* reexamination and trial courts. The range of conditions under which somebody would choose *inter partes* over the other three are real, and growing. However, it is only reasonable to expect that more options and choices means smaller market share for each one.

A more important comparison is that *inter partes* reexaminations already have 55% of annual caseload of patent lawsuits that go to trial. That is a very substantial percentage, and is likely already has substantial impact on the case load in Federal court. The clear trend is that *inter partes* reexaminations will find its niche and become an important part of post-grant patent review.

Despite this success, there is widespread feeling that *inter partes* reexaminations haven't worked. That is largely because the US Patent Office made an unreasonable projection to Congress that 400 *inter partes* reexaminations would be filed in 2000, and the number would grow at 10% per year⁹. However, there was no basis for this projection. It would be unprecedented for a new legal strategy to be created and get that much use (more than one filing per day!) in its first year. As it turned out, the statute needed an overhaul in 2002 to be viable at all, further highlighting how silly the projections were.

It was irresponsible to set the expectation that *inter partes* reexaminations could possibly meet these wild projections. Instead of being a failure, *inter partes* reexaminations are an example of a *successful* launch of a new legal process to challenge patents in the patent office.

Post-Grant Review Won't Replace Most Litigation

A major topic of today's hearings is to discuss the need for further kinds of post-grant review processes, including the so called "first window" and "second window" challenge mechanisms. In order to address these, we have to step back and ask why is it that we think we need more post-grant review processes.

Post-grant review is usually posited as an alternative to litigation. The idea is compelling. If there were a way for a patent holder, and potential infringer to dispute the validity of a patent without going to court, we could all avoid the cost and time delay that litigation entails. So, the goal is to have a process for post-grant review that is fair and is streamlined to avoid the complexity and cost of a court trial. That should dramatically lower litigation rates.

It's a noble goal, but, unfortunately, it is doomed to failure.

⁹ http://www.uspto.gov/web/offices/dcom/olia/reports/reexam_report.htm

The problem is the unexamined assumption that patent litigants actually want a method that is fair, fast and cheap. The key role here is played by the potential infringer because they are the ones making a decision to challenge a patent in post-grant review, not the patent holder.

Anybody who wants to challenge a patent is doing so because they have a commercial interest at stake - most often it is because they fear being found to infringe the patent, although there are other reasons. The stakes are very high for a potential infringer, so high that they are very likely to outweigh the legal costs. Challengers want to win, and they will pick the process that they think gives them the best likelihood of winning. Costs are at best a distant second. It would be a foolish economy for them to choose a cheaper option, and then lose. Getting a speedy result, which seems like a great goal, may actually be a negative factor - a potential infringer often wants to delay things as much as possible.

Streamlined post-grant procedures give a challenger fewer opportunities to win than a full blown trial. This is just common sense. In a court trial, one can use extensive discovery to come up with something useful you didn't know up front. Or you can use a silver tongued legal orator to charm a jury. The full panoply of tricks and techniques that a top legal team can deploy are available at trial.

Meanwhile in a post-grant review process, some of these maneuvers will not be available - if the system is streamlined. So, you give something up. What you get in return is a cheaper proceeding (which you may not care about) and faster results (which you may not want). As a result, most patent litigators will not advise their clients to use reexamination as an alternative to trial. Again, this is just common sense - why would a trial lawyer advise against a trial?

This isn't just self interest - many trials are won on the basis of arcane complexities that are not available in a post-grant review process. A good trial lawyer knows those tricks and uses them to a client's advantage. Why fight with one hand tied behind your back?

Of course, any post-grant process has the inherent unfairness that the patent holder has everything to lose (his patent) and nothing to gain. Meanwhile, in a lawsuit, both sides have some skin in the game - the patent holder could lose a patent (by having it ruled invalid or unenforceable), while the defendant could be found to infringe. So, by its very nature, post-grant review is a one-sided affair compared to a lawsuit.

The only way to create a process that a typical challenger would prefer would be to create one in which it is much more likely that the challenger will win. So, only a mechanism that was manifestly unfair to the patent holder would be chosen by a challenger in preference to the full range of options available at trial. It would

have to have a huge advantage for the challenger to give up the ability to seek discovery and the other range of trial activities.

Once again, it is just common sense. If a challenger has to opt between two choices, and one of them has fewer available legal options, why make that choice? Cost isn't important to a serious infringer and speed can be a negative. So why would a majority of challengers take the post-grant review option?

Unfortunately, most discussions of post-grant review lack this common sense perspective. Instead, they focus on an idealistic view that a challenger will set aside its best interests. On top of that, the challenger's trial attorney would have to set aside his or her best interests (as well as his or her client's) and advise that they'd be unable to accomplish more in a full trial. Why on earth would we expect this to happen a large fraction of the time?

Likelihood of winning is not the only factor. As we have seen from the litigation statistics, 96% of all litigation isn't about getting to trial. Instead, it is a process that the parties use to force each other to the table for settlement. Indeed, 30% of all cases settle before the court takes any action at all, so it is not even a question of using the court as a referee.

Filing a lawsuit is a useful tool in negotiation in part because the parties can control it if they come to terms. Upon settlement, a civil lawsuit is dropped no matter what the merits. That isn't what happens with either *ex parte* or *inter partes* reexamination. Once prior art is brought to the attention of the patent office, the reexamination will proceed. There is no way to "call off the dogs" if the parties settle during the reexamination process. This makes it very hard to use reexamination as a bargaining chip.

The reality is that post-grant review procedures will never be an alternative for a large fraction of patent litigation. This is a very key point for this committee to consider in deliberating on patent reform. Any scheme which aims to replace the bulk of patent litigation with post-grant review will run afoul of these simple common sense issues.

The point of post-grant review should not be to replace most litigation. Instead, post-grant review procedures offer a way to resolve a class of patent disputes that would be ill-suited to litigation. This isn't so much the cases that lead to existing lawsuits - instead. The existing reexamination proceedings do displace some lawsuits on the margin. Mostly this happens because when a reexamination takes a patent out of circulation no future lawsuits can stem from that patent. However, the goal of reexamination is not a one-for-one replacement of litigation. On the whole post-grant review procedures serve a different purpose - to improve patent quality and resolve disputes that are not well-suited for court.

The anonymous nature, and the low cost of *ex parte* reexamination makes it a valuable tool for many who want to challenge a patent. Anyone can file a reexamination request, which means that an interested party can challenge a patent without being an infringer. Generally speaking, you can't do that with a patent lawsuit - you must have been threatened with litigation expressly or implicitly by the patent holder before you can file for declaratory judgment. *Ex parte* reexamination can be thus be used by a potential infringer fearful of a patent in a manner that simply couldn't be done with a lawsuit.

These factors explain why there are five times as many *ex parte* reexaminations each year as patent trials. *Ex parte* is by far the most popular way to challenge a patent. *Inter partes* reexamination also has its place. The rapid growth of *inter partes* reexamination and the fact that it is already at the level of more half the rate of patent trials suggest that it too will find a role in patent disputes.

However, the current reexamination processes will never be a substitute for most patent lawsuits because of the fundamental point that a full blown trial is better for the challenger under many circumstances. The same is true for any proposed post-grant review process that is less than a full trial. New post-grant procedures are far more likely to enable a new kind of challenger than to supplant lawsuits for existing classes of challengers.

As a result, advocates of post-grant review have taken their proposals in several different directions. One is to make the post-grant review more and more like a full trial. An experiment in this direction is the patent opposition process used in the European Patent Office. An EPO opposition has many more features of a trial than the USPTO reexamination processes. In particular, the EPO allows discovery and oral arguments. Recent proposals¹⁰ in the House of Representatives are similar in that they increase the scope of post-grant review to bring more and more features of a full trial into the process.

The problem with making post-grant review more and more like a trial is that the closer you get, the less advantage there is in having a special mechanism. If you make it just as complicated and costly as a trial, what have you gained?

Indeed, a constitutional law expert would say that you have lost in this bargain. Why have one form of trial handled by the judiciary, and what amounts to another form of trial handled by the executive branch? There are serious constitutional issues here. There is also a common sense question of why have two different trial-like proceedings that could conflict? The closer one brings post-grant review to being a full trial, the more one begs these questions.

Alternately, if you leave the post-grant process significantly different than a trial, then you are back in the same position as before. A challenger will still be put in the position of asking, what gives me the best result? If the difference between a

¹⁰ HR 2795

full trial and a reexamination is trivial, then they may well choose it, but what has been gained? Or, if the post-grant review is significantly different than a full trial, it won't be optimal for most challengers.

You can't have it both ways. A process that is more streamlined and efficient than a full trial must, by that very fact, have left out some significant complexity. More than likely, that complexity is a boon in some cases and challengers will opt out whenever they can. Fortunately, there is a way out of this mess, as we will discuss below.

Another direction is to not make post-grant review an alternative, but instead turn it into a new and additional way to harass a patent holder. The goal here is for an infringer to use post-grant review as something to do as part of a strategy that includes litigation. So, the challenger might throw some prior art at the patents in an anonymous *ex parte* reexamination, then it might file a declaratory judgment lawsuit to force the patent into a full lawsuit. Then if it loses in district court it might come back with an *inter partes* reexamination later on, with some prior art that it reserved for this purpose. During the appeal the (by then) convicted infringer can then trade on the excuse "wait, the patent office is reexamining the patent!" and ask to delay or stay the ruling of the court pending the completion of the reexamination. Of course, the only reason the reexamination was going on at that late date is the challenger deliberately avoided invoking the reexamination process until after it had lost.

This approach can be effective because it drains additional capital from the patent holder who is forced to fight a multi-front war. This is especially true when the infringer is a large company with nearly limitless resources. It has every interest in delaying justice and draining the resources from a small patent holder.

However, the effectiveness comes at a price. This approach subverts a fundamental principle of the American justice system - you shouldn't get to try the same case multiple times. It's like when kids try to shop a request to both Mom and Dad to see who gives the best answer. This may be unavoidable with five year olds, but it is irresponsible to allow this sort of behavior in a serious issue of patent law.

The estoppel provisions of today's reexamination procedures are designed to try and eliminate a type of double jeopardy, so to speak. However, the provisions have a serious flaw - they only work in one direction. There are estoppel limitations on evidence raised in a reexamination, preventing them from being used in a subsequent patent lawsuit in district court. However, there is no estoppel or waiver in the other direction - it is perfectly feasible to raise evidence in district court, lose on that evidence, and then subject the patent holder to a reexamination process all over again on the same evidence.

A more subtle but just as damaging abuse of the system comes from what one could call "evidence hiding." A company worried about infringing a newly issued patent may have knowledge of some prior art - for example, un-cited work done by one of its engineers. So, that means the company will submit it promptly in an *ex parte* reexamination, right?

Wrong! Today virtually any attorney would advise a client that was seriously concerned about the patent to hide the data and hold it in reserve. It's much like the question of whether to participate in a post-grant review, or instead to wait for a full trial. Most attorneys today would recommend hiding your best evidence on prior art or other validity issues, waiting to use it only in the context of a full trial or some other later action.

There are other reasons to hide evidence. As one example, the patent holder may go after your competitor first. Why help a competitor by busting the patent? The cynical old saw "the enemy of my enemy is my friend" drives this behavior. In fact, a company in possession of important prior art may not use the evidence at all - instead it may do a deal with the patent holder to license the patent cheaply, while burying the prior art. Competitors will have to pay full price. And the public does not benefit from this hidden or "submersed" evidence conduct; the patent system is about disclosure which in turn promotes technical progress.

Indeed, this evidence hiding harms the entire patent system. While the individual entity doing the evidence hiding may benefit, everybody else suffers. If a patent is invalid, then it should be struck down. Leaving an invalid patent out there only raises the probability that somebody else, not in possession of the evidence, will run afoul of it. A well-designed post-grant review process will give a strong incentive for parties to use their evidence early rather than late.

Rather than having an incentive to come forward, the current system gives an incentive to sink the evidence and prevent justice from occurring. To see how widespread this practice is, all one has to do is look at legal articles about reexamination. One of the most criticized pieces of the current *inter partes* process is a provision that says a challenger is estopped from using any information in a later district court trial that it could have presented in the *inter partes* reexamination. This condition is explicitly trying to prevent evidence hiding. The fact that it is singled out for complaint isn't a weakness of *inter partes* - it shows the strength of a provision that is meant to be fair to both parties.

Unfortunately there is no similar evidence hiding provision in the other direction - requiring that a litigant use its best evidence in trial before a district court, by being estopped or waiving the right to pull it out during a later reexamination.

First & Second Windows

Much of the recent debate on post-grant review has focused on the issue of timing - should be there one point in time to do post-grant review (the so-called first window), or should there be a second time when the patent is about to be the subject of a dispute?

As explained above, I believe that existing reexamination procedures are effective and I question the utility of having yet another form of post-grant review alongside the existing *ex parte* and *inter partes* reexamination procedures. However, since the issue of timing is important to this committee I will address it.

In order to understand the timing issue, it is worth walking through the relevant stages of a patent's life. Most patent applications are published 18 months after being filed with the USPTO. At that point, the world gets to see the patents for the first time.

And, the world gets to start attacking them too. Publication of the application effectively puts the world on notice about the patent. In the case of my company, we've come to expect calls from venture capitalists and interested companies as soon as our patent applications hit the USPTO web site. Make no mistake about it - the world notices when a patent application is published.

Publishing opens the patent application up to several sorts of challenges. This includes third party submission of prior art to the patent office. Someone can also file interference proceedings to challenge inventorship. So, even before there is post-grant review, the world gets to take a shot at the patent while it is still in progress.

About 12 months after being published, the patent issues. The so-called first window period for post-grant review would begin at that point. I believe that it is vital for the first window to be a very limited duration. There are two reasons for this.

The first involves pendency - the amount of time it takes between filing a patent application and the patent issuing. Pendency today is 30 months¹¹ on average, and the number is increasing. One of the few patent reform issues on which virtually everybody agrees is that the current pendency is too long and increasing it further could cripple the patent system.

The time period in which a challenger can file a first window review request is in effect, an addition to pendency. A small company that is counting on the patent to win additional financing from its investors, or to launch its product strategy can't know whether they really have the patent until it has gotten past the window period.

¹¹ <http://www.uspto.gov/web/offices/com/annual/2005/index.html>

Patents that are challenged in the first window are immediately thrown into doubt and, for all practical purposes, can't be used or counted upon until the process is over. This further extends the effective pendency for those patent holders whose patents are challenged. Rules must be instituted so there is proper recourse against challengers who unfairly use the post-grant review mechanism to harass a patent holder.

So, the length of the first window extends the effective pendency for all patents. For patents that are challenged (even if challenged without merit), we have to add the time for the review - which is probably another 2 years. In short, the first window is a recipe for greatly increasing effective pendency.

A patent holder who doesn't use patents as a pillar of its business strategy does not care about this. Defensive use of patents is not greatly damaged by this effective pendency increase. As long as you have a large defensive stockpile, adding to pendency does not substantially hurt you.

However, an increase in pendency is extremely damaging to any company that cares about its patents. It is particularly damaging to small companies. A start-up company often pins all its hopes to a single patent. Delaying that process is extremely harmful.

Pendency is already a huge problem within the patent office, which harms nearly every part of the patent system. Unless there is a solution to pendency in hand, it seems irresponsible to create a further negative impact on pendency.

The second reason to have a very short first window is to prevent evidence hiding. The only way to get people to share information is to give them a strong incentive to do so. That's why the minister says "speak now or forever hold your peace" in a wedding ceremony. There is great public benefit in encouraging challengers to come out with their best evidence as soon as they can.

Since average pendency today is 30 months, and the patent is published after 18 months, any challenger already has 12 months to study the patent application. That time period should give it ample notice to get its ducks in a row for a challenge. A first window period of 6 months after issuance would seem ample to fine tune the request and submit it.

Note that I am not endorsing a first window. As explained above, it is far from clear that we need any new post-grant process. However, if there is a new post-grant review procedure, it should be limited to a window of 6 months from the date of issue of the patent.

This brings us to the "second window" proposals. In my mind there is no conceivable justification for adding a second window for extensive post-grant review.

Today, we already have two reexamination procedures which can be done during the entire life of the patent. *Ex parte* and *inter partes* reexaminations have no window restriction at all. Why do we need yet another one?

The reasoning, so far as I can follow it, is simply another way to try to devalue patents, particularly for small companies that cannot afford to plow through the multiple hurdles being thrown in front of them. Among other things, the existence of a second window encourages evidence hiding. There is no reason to have a first window if you allow a second one - who would bother to do it up front?

Conclusion: A Genuine Solution - Dedicated Patent Court

The fundamental dilemma posed by post-grant review is how to differentiate it from a trial court. On one hand, there is a strong pull to make post-grant review differ from trial, because that lets it be faster, cheaper and more efficient. On the other hand, there is an inexorable pull in the opposite direction towards adding all of the features found in a court trial.

This is a classic "slippery slope". Once you start adding more features of a trial to post-grant review, it is hard to stop. Look at the present debate. We have already created two forms of post-grant review (*ex parte* and *inter partes*). We're here today to talk about yet another form, which adds even more features of a trial.

There is a strong reason for this. Unless you have the features of a trial, the trial will be a preferred venue for many of the parties.

I believe the answer is not to fight this trend, but rather to embrace it. The dramatic way to reform patent litigation is to create a separate court to hear patent cases.

This is similar to what is done with Tax Court, or Bankruptcy Court. Instead of patent cases being heard in a Federal District Court they would be heard in Patent Court. Patent lawsuits are already heard by a dedicated court at the appellate level - the US Court of Appeals for the Federal Circuit. Why not do this at the district court level as well?

There are many reasons why this approach would benefit all parties involved in patents. When a patent trial is held in Federal District Court, it must compete on the schedule with the myriad other types of federal cases. Patent cases are highly technical and specialized; so many Federal judges are not as familiar with

the complex legal issues as they would be if they only heard patent cases. That's the reasoning behind Tax Court and Bankruptcy Court, yet, if anything, it applies more to patents than to those areas.

By creating a special court for patent trials, we could greatly expedite them. Rather than competing with every other issue, patent cases would be tried by a dedicated resource. This would greatly speed justice and would also lower costs.

At the same time, having jurists experienced with patent law, doing nothing but patent cases, would give all parties more confidence in the outcome. It would also eliminate venue shopping, which is a highly contentious aspect of current patent litigation and itself a major topic of patent reform.

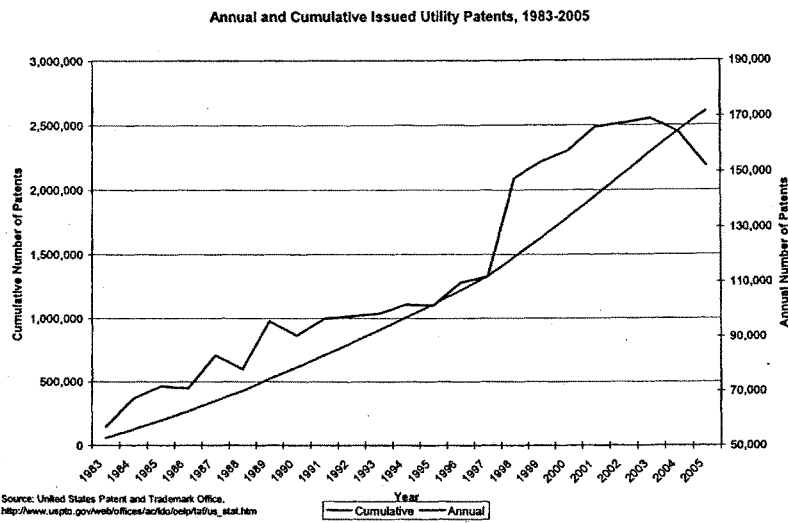
In effect, many of the post-grant review processes are a separate patent court in disguise. Once you allow discovery and oral arguments you have in essence set up a separate court system. The problem is that doing one such system in the Executive Branch, while leaving the current Federal District Court in place in parallel just begs for conflicts. Most proposals would put the US Court of Appeals for the Federal Circuit in charge of adjudicating the differences - but why set up a system ripe for conflict in the first place?

The existing reexamination processes instituted by the USPTO could remain in place. As explained above, they are popular, successful, and serve a different function than a full-blown lawsuit.

I believe that a separate patent court would be an excellent solution. It is bold, and, in that boldness, are challenges. There are many details to get right, and some of them are beyond my own expertise. However, it is much better to fix a problem once and for all than add band-aids that ultimately won't work.

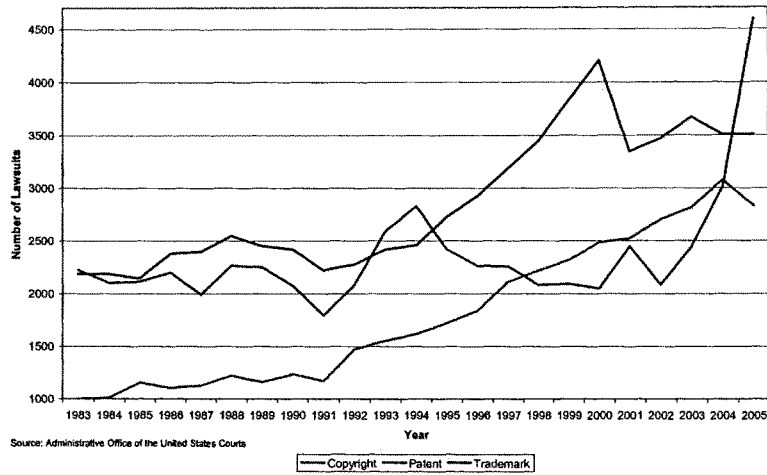
Appendix - Charts and Data Tables

The following charts and data support arguments in the testimony.



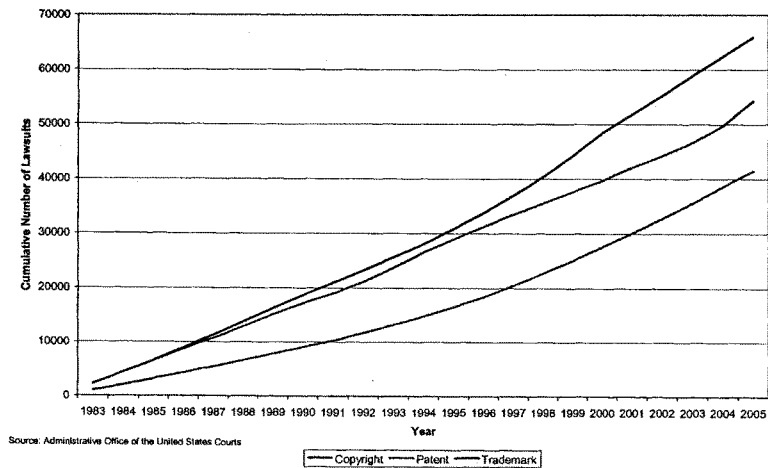
The number of new patents issued each year has grown over the last 22, with occasional dips downward. 2004 and 2005 represent the largest drop in annual patent issue rates seen during this entire period.

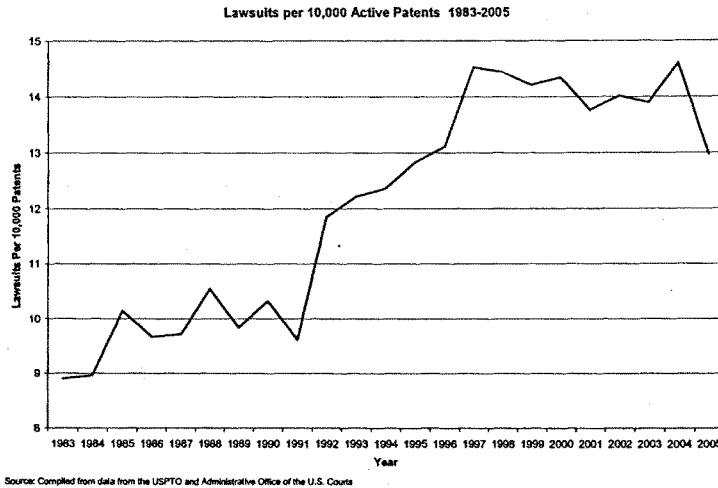
Intellectual Property Litigation - New Cases Filed 1983-2005



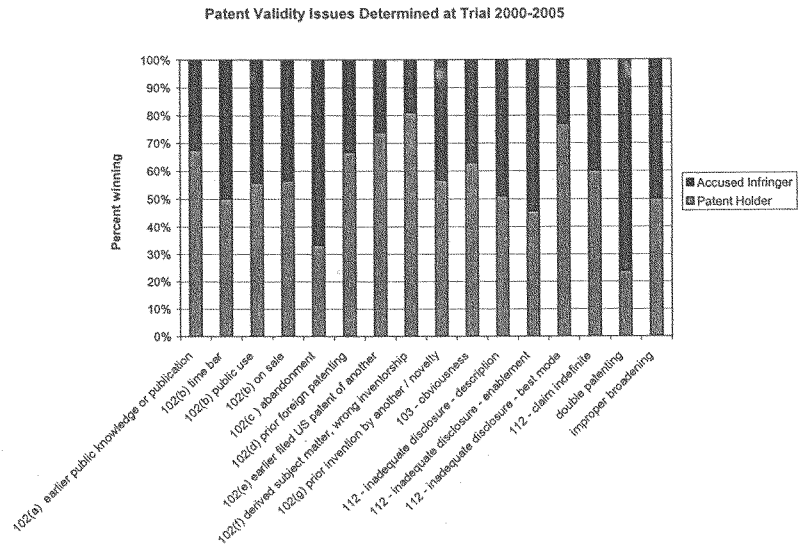
Patent lawsuits have grown steadily over the last 22 years, in large part because they keep pace with the steady rate at which patents are granted. Trademark and copyright lawsuits tend to fluctuate with greater growth during some periods and contraction during others. To see the overall trends we can look at the cumulative figures below. Patent lawsuits are in last place.

Cumulative Intellectual Property Litigation 1983-2005





Since the number of patents has grown enormously over the course of the last 22 years it is difficult to directly compare patent litigation rates. The solution is to look at the number of patent lawsuits occurring in a year, per 10,000 active patents, per year. The 2005 rate is lower than at any point since 1995.

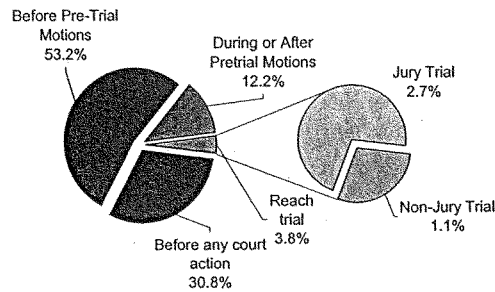


Federal Court trial results on patent validity issues raised at trial from 2000 through 2005.

In general patent holders do well in validity issues in those suits which go to trial. The total across all validity issues is that the patent holder wins 58%

Source: University of Houston Law Center
[http://www.patstats.org/Composite%20Table%20\(2000-2004\).html](http://www.patstats.org/Composite%20Table%20(2000-2004).html)

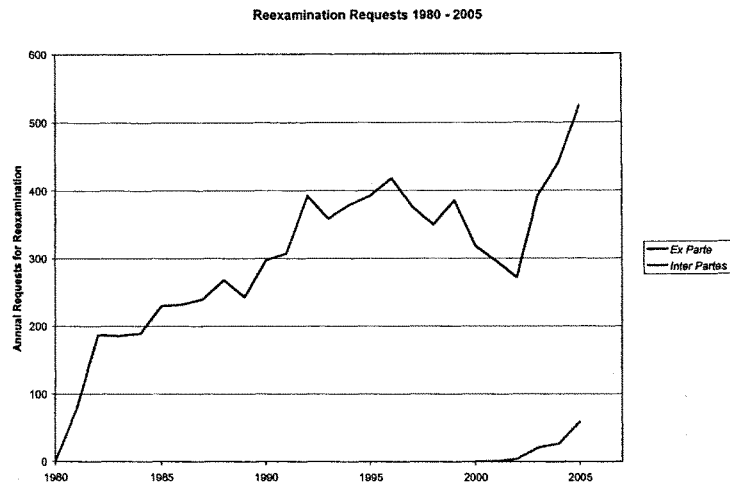
How Patent Lawsuits Terminated In 2005



The vast majority of all patent lawsuits settle before reaching trial. The pie chart above shows the disposition of cases in 2005. 96.2% of all cases terminated (i.e. settled) prior to trial, with 30.8% terminating prior to any court action whatsoever. The table below shows the data for 2001 through 2005

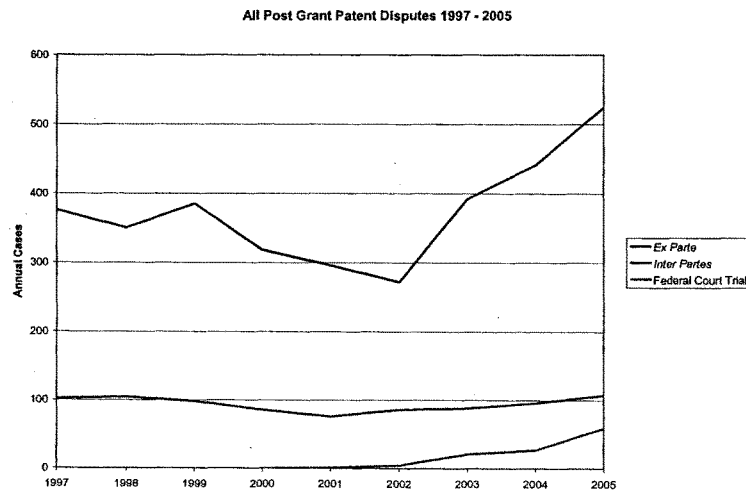
Source: US Courts Statistical Reports
<http://www.uscourts.gov/library/statisticalreports.html>

Year	Total Cases Terminated	Settlements Before Trial			Trial		
		Before any Court Action	Before Pre-Trial Motions	During or After Pretrial Motions	Total Reaching Trial	Non-Jury Trial	Jury Trial
2005	2,804 100.00%	863 30.8%	1,492 53.2%	342 12.2%	107 3.8%	31 1.1%	76 2.7%
2004	2,676 100.00%	769 28.74%	1,432 53.51%	379 14.16%	96 3.59%	29 1.08%	67 2.50%
2003	2,482 100.00%	673 27.12%	1,372 55.28%	349 14.06%	88 3.55%	27 1.09%	61 2.46%
2002	2,466 100.00%	665 26.97%	1,413 57.30%	302 12.25%	86 3.49%	30 1.22%	56 2.27%
2001	2,323 100.00%	634 27.29%	1,330 57.25%	283 12.18%	76 3.27%	24 1.03%	52 2.24%



Ex parte reexamination started in 1981, and has become the most popular way to challenge a patent, outstripping Federal court by a factor of five in cases per year. Inter partes reexamination effectively started in 2003, and has quickly grown to 55% the level of Federal courts in cases per year. Over time it seems likely that trial will slip to last place as a means to adjudicate patent validity.

Source: USPTO reports



Testimony of Nathan Myhrvold

**Perspectives on Patents:
Post-Grant Review Procedures and Other Litigation Reforms**

John R. Thomas
Professor of Law
Georgetown University Law Center

Thank you for the opportunity to testify before the Committee on the subject of post-grant review procedures. I appear today on my own behalf, as a concerned observer of the patent system.

Current patent reform efforts have been accompanied by an often heated exchange of views concerning a range of subjects. Despite their differences on other issues, however, many observers agree that our current administrative revocation procedures have been unsuccessful ventures. Limited use of both *ex parte* and *inter partes* reexamination procedures have placed both procedures in a state of desuetude.¹ Many actors in the technology community view more full-fledged opposition procedures as the best means for harnessing the expertise of the PTO to assess the validity of issued patents. Opinions differ, however, concerning many of the important details of opposition procedures.

In their efforts to establish an effective opposition system, patent reformers would do well to identify clearly its intended goals. Some observers view oppositions

¹See, e.g., Kristen Jakobsen Osenga, *Rethinking Reexamination Reform: Is it Time for Corrective Surgery, or Is It Time to Amputate?*, 14 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 217 (2003).

as a rather cabined curative proceeding that would effectively serve as the final stage of patent acquisition procedures. Others view oppositions as low-cost litigation substitutes that potentially provide a way to improve quality throughout the nation's entire portfolio of issued patents. In addition, in a world where technology knows no borders, we may wish our opposition procedure to reflect international norms, thereby serving the laudable goal of patent harmonization. Although these policy goals are not mutually exclusive, the precise contours of an opposition system follow from those that are selected or emphasized.

Allow me to address three aspects of opposition proceedings under current discussion. One is whether the availability of oppositions should be subject to time limits. As with the European Patent Convention,² current proposals before the House of Representatives provide for a nine-month period. Debate has proceeded upon whether legislation should call for a six-month second window for initiation of an opposition proceeding, based upon receipt of a charge of patent infringement.

Imposing time limits on oppositions has been justified upon notions of stability of the property right. Further exploration of this view is appropriate. First, the nine-month European deadline is not an absolute one, in the sense that nullity trials and similar options remain available under the national laws of European Patent Convention signatory states.³ In the United States, the Patent Act places no time limit

²European Patent Convention, Art. 99(1).

³See Ernst K. Pakuscher, *Patent Procedure in the Federal Republic of Germany*, 4 INT'L TAX & BUS. LAW. 86, 97 (1986).

upon commencing a reexamination.⁴ Similarly, under the reissue statute,⁵ patent proprietors themselves possess the ability to amend their claims at any time during the life of the patent.

Time limits may also be motivated by a desire to avoid harassment of patentees. Interestingly, experience with the German patent system suggests that such restrictions may have the opposite effect. The German law once imposed a five-year deadline upon contesting validity of a patent. Observing that many such challenges occurred on the eve of the deadline, the time restrictions were ultimately eliminated—reportedly resulting in a measurable decrease in the number of oppositions filed.⁶

Strict time limits may also detract from the ability of an opposition to serve as a prompt, inexpensive mechanism for assessing a patent's validity. Patents often issue long before the inventions they claim become commercially viable. For example, at the time a patent claiming a pharmaceutical or medical device issues from the PTO, its proprietor may remain engaged in the FDA marketing approval process. Other patents are sold to new owners with more aggressive enforcement postures; still others are simply ahead of their time. Requiring potential patent challengers to provoke oppositions early in a patent's term may lead to ill-informed decisions, to the detriment of patent owners and the public alike. As a result, debate over time limits

⁴35 U.S.C. §§ 302, 311 (2000).

⁵35 U.S.C. § 251 (2000).

⁶See Fromut Volp, *Einspruchsverfahren nach Patenterteilung* ("Opposition Proceeding After Patent Grant"), 1959 GRUR 260.

may properly center not upon whether a six-month second window is justified, but rather upon whether time limits can be justified at all.

Second, following the lead of Professor Mark Janis,⁷ I encourage the Committee to recognize that the trademark law has for many years allowed for both a pre-grant opposition and a post-grant cancellation procedure. In this context, the PTO has promulgated rules that incorporate such features as an extensive motions practice, hearings, and discovery, including interrogatories, document production, and depositions. I do not wish merely to offer the naive suggestion that trademark *inter partes* procedures could simply be adopted wholesale into a patent opposition system. Yet the PTO's considerable experience with inter partes proceedings in the context of trademarks should both assuage concerns over its institutional competence, and provide valuable guidance for patent opposition procedures.

Last, I would encourage the Committee to consider the public goods problems that accompany patent oppositions. No matter how refined the contours of an opposition system are, individuals may possess limited incentives to employ them. The reason, of course, is the general rule that a patent is valid or invalid as to all the world. A firm that prevails in a patent opposition must share its success with its marketplace competitors. This forced sharing may, of course, lead to a suboptimal level of patent challenges.⁸ The Hatch-Waxman Act incorporated a 180-day generic

⁷Mark D. Janis, *Rethinking Reexamination: Toward A Viable Administrative Opposition System for U.S. Patent Law*, 11 HARV. J. L. & TECH. 1 (1997).

⁸See John R. Thomas, *Collusion and Collective Action in the Patent System: A Proposal for Patent Bounties*, 2001 U. ILL. L. REV. 305.

exclusivity period in order to address this public goods problem;⁹ similar attention in the context of patent oppositions may ultimately increase their effectiveness.

Thank you for the opportunity to testify before you today. I would be pleased to answer any questions.

Biography

Jay Thomas is a member of the faculty of the Georgetown University Law Center. He has served as a law clerk to Chief Judge Helen W. Nies of the Court of Appeals for the Federal Circuit, visiting fellow at the Max Planck Institute in Munich, Germany, and visiting researcher at the Institute of Intellectual Property in Tokyo, Japan. Professor Thomas has also served as a member of the visiting faculty at the Cornell Law School and the University of Tokyo, a member of the faculty of the George Washington University Law School, and an instructor at the PTO Patent Academy.

Professor Thomas holds a B.S. in computer engineering from Carnegie Mellon, a J.D. *magna cum laude* from the University of Michigan Law School, and an LL.M. with highest honors from the George Washington University Law School. He is admitted to the Maryland state bar and to the patent bar. In his capacity as visiting researcher at the Congressional Research Service, he has authored or co-authored over twenty CRS reports concerning the patent law. He recently published his fifth book concerning intellectual property, the 650-page treatise *Pharmaceutical Patent Law*.

⁹21 U.S.C. § 355(j)(B)(iv) (2000).